



Catalogue no. 13-604-MIE — No. 058
ISSN: 1707-1739
ISBN: 978-0-662-47033-5

Research Paper

Income and Expenditure Accounts Technical Series

Canadian Tourism Satellite Account, 2002

by Demi Kotsovos

Income and Expenditure Accounts Division
21st Floor, R.H. Coats Building, Ottawa, K1A 0T6

Telephone: 1-613-951-3640



Statistics Canada
Statistique Canada

Canada

Canadian Tourism Satellite Account, 2002

This paper highlights the Canadian Tourism Satellite Account (CTSA) developed by Statistics Canada. The CTSA provides an economic measure of the importance of tourism in terms of expenditures, Gross Domestic Product and employment for Canada. It permits a comparison of tourism with other industries within Canada since the concepts and methods used are based on the framework of the Canadian System of National Accounts. The study revealed that tourism is an important part of Canada's well diversified economy. This paper presents the results of the CTSA for reference year 2002.

This study was prepared by staff of the Research and Development Projects and Analysis Section, Income and Expenditure Accounts Division, Statistics Canada. The study was funded by the Canadian Tourism Commission.

The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences - Permanence of Paper for Printed Library Materials, ANSI Z39.48 - 1984. (∞)

Ottawa
October 2007

Catalogue no. 13-604-MIE no. 58
ISSN: 1707-1739
ISBN: 978-0-662-47033-5

Catalogue no. 13-604-MPB no. 58
ISSN: 1707-1720
ISBN: 978-0-662-05151-0

Published by authority of the Minister responsible for Statistics Canada

© Minister of Industry, 2007

La version française de cette publication est disponible (n° 13-604-MIF n° 58 au catalogue)

All rights reserved. The content of this electronic publication may be reproduced, in whole or in part, and by any means, without further permission from Statistics Canada, subject to the following conditions: that it be done solely for the purposes of private study, research, criticism, review or newspaper summary, and/or for non-commercial purposes; and that Statistics Canada be fully acknowledged as follows: Source (or "Adapted from", if appropriate): Statistics Canada, year of publication, name of product, catalogue number, volume and issue numbers, reference period and page(s). Otherwise, no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form, by any means—electronic, mechanical or photocopy—or for any purposes without prior written permission of Licensing Services, Client Services Division, Statistics Canada, Ottawa, Ontario, Canada K1A 0T6.

Table of contents

Executive summary	5
Canadian Tourism Satellite Account, 2002	6
Appendix A Concepts and definitions used in the Canadian Tourism Satellite Account	13
Appendix B Sources and methods for the Canadian Tourism Satellite Account	16
Appendix C Tourism industries of the Canadian Tourism Satellite Account.	20
Appendix D Tourism commodities of the Canadian Tourism Satellite Account	22
Appendix E Tourism expenditure by commodity, Canada, 2002	23
Appendix F Gross domestic product and employment for tourism and non-tourism industries, Canada, 2002	24
Glossary.	25
Reference documents	32
Technical series.	33

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

Executive summary

- Tourism contributed 2.2% of Canada's gross domestic product (GDP) in 2002. Tourism GDP at basic prices reached \$23.3 billion up 4.1% from 2000.
- Tourism contributed 3.9% of total employment and generated 611,100 jobs in 2002. This was almost unchanged (up 0.1%) from 2000.
- Tourism demand in Canada was \$56.6 billion in 2002, up 5.3% from 2000.
- Expenditure on air transportation decreased 7.2% from its 2000 level leading to a decrease in total transportation of 2.1% over this period.
- Non-residents accounted for \$18.1 billion of tourism spending in Canada, up 1.7% from 2000.
- In 2002, over two-thirds of tourism spending in Canada was by Canadians (\$38.4 billion). This was up 7.0% from 2000.
- Canadians spent \$20.6 billion on tourism abroad, down 1.6% from 2000.
- In 2002, Canadians spent more on tourism outside Canada than foreigners spent in Canada. The tourism trade deficit narrowed to \$2.5 billion from \$3.1 billion in 2000.

Canadian Tourism Satellite Account, 2002

Introduction

The Tourism Satellite Account (TSA) has become the internationally accepted framework by which to measure tourism activity in an economy. The Canadian TSA (CTSA) follows the international guidelines adopted by the United Nations Statistical Commission¹ and is rooted in the Canadian System of National Economic Accounts (CSNEA).

As such, the CTSA provides measures of the economic importance of tourism in terms of expenditures, Gross Domestic Product and employment which are comparable with similar measures from CSNEA for the overall Canadian economy. It also permits a comparison with other industries in terms of output, employment and so on.

The CTSA provides a coherent framework within which to integrate and analyse economic statistics relevant to tourism, both on the supply (i.e., industry) side and on the demand (i.e., tourist) side. It also defines what are considered to be the tourism commodities and the tourism industries, and consequently has helped to shape the development of tourism statistics in Canada.

Last, the CTSA 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 and employment in the tourism industries, and (iii) studies on the government revenue that can be attributed to tourism.

This report presents the CTSA for the reference year 2002, incorporating the most recently available final Input-Output data. Detailed tables for the year 2002, as well as a brief description of concepts, definitions, sources and methods are included in the appendix. The forthcoming CTSA Handbook² provides a more comprehensive look at how the Account is compiled.

Tourism grew from 2000 to 2002

Tourism gross domestic product (GDP)³ reached \$23.3 billion in 2002, up 4.1% from 2000. This is equal to 2.2% of economy-wide GDP in that year. Tourism expenditures climbed to \$56.6 billion in 2002, a 5.3% increase from their level in 2000. The number of jobs in the Canadian economy grew 3.5% over this period, whereas tourism jobs remained fairly steady at 611 thousand.

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

2. Statistics Canada, forthcoming, December 2007.

3. All references to GDP are at "basic prices" (see Appendix A). All growth rates of dollar denominated series are in nominal terms.

Table 1 Tourism gross domestic product by industry, Canada

	Tourism gross domestic product		Growth	Distribution	
	2000	2002		2000	2002
	millions of dollars			percentage	
Transportation	5,954	5,526	-7.2	26.6	23.7
Accommodation	5,246	5,708	8.8	23.4	24.5
Food and beverage services	2,691	2,898	7.7	12.0	12.4
Other tourism industries ¹	3,466	3,786	9.3	15.5	16.2
Total tourism industries	17,357	17,919	3.2	77.5	76.8
Other industries ²	5,050	5,400	6.9	22.5	23.2
Total tourism gross domestic product	22,407	23,319	4.1	100.0	100.0

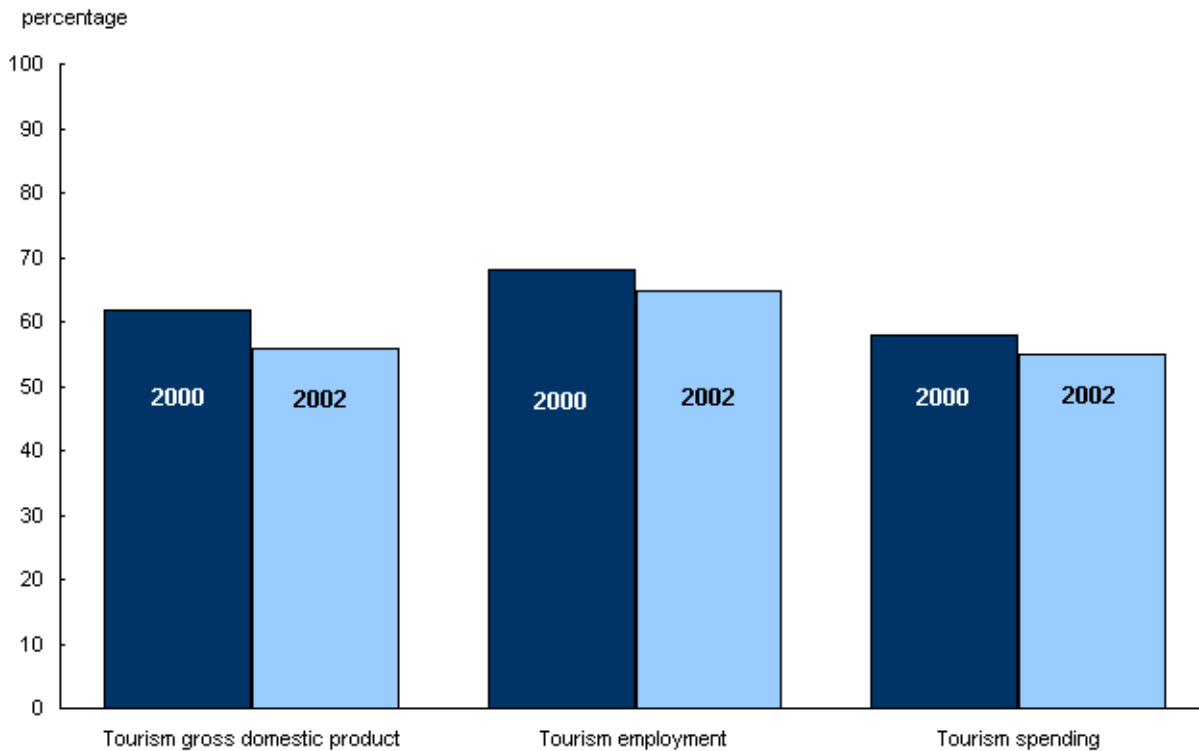
1. Includes recreation and entertainment services and travel agency services industries.

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.

Air transportation industry hit hard

The profits of Canada's air transportation industry were sharply lower in 2002, compared with 2000. 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, 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 16.1% from its level in 2000. This led, in turn, to a 7.2% drop in tourism GDP for the transportation industry overall.

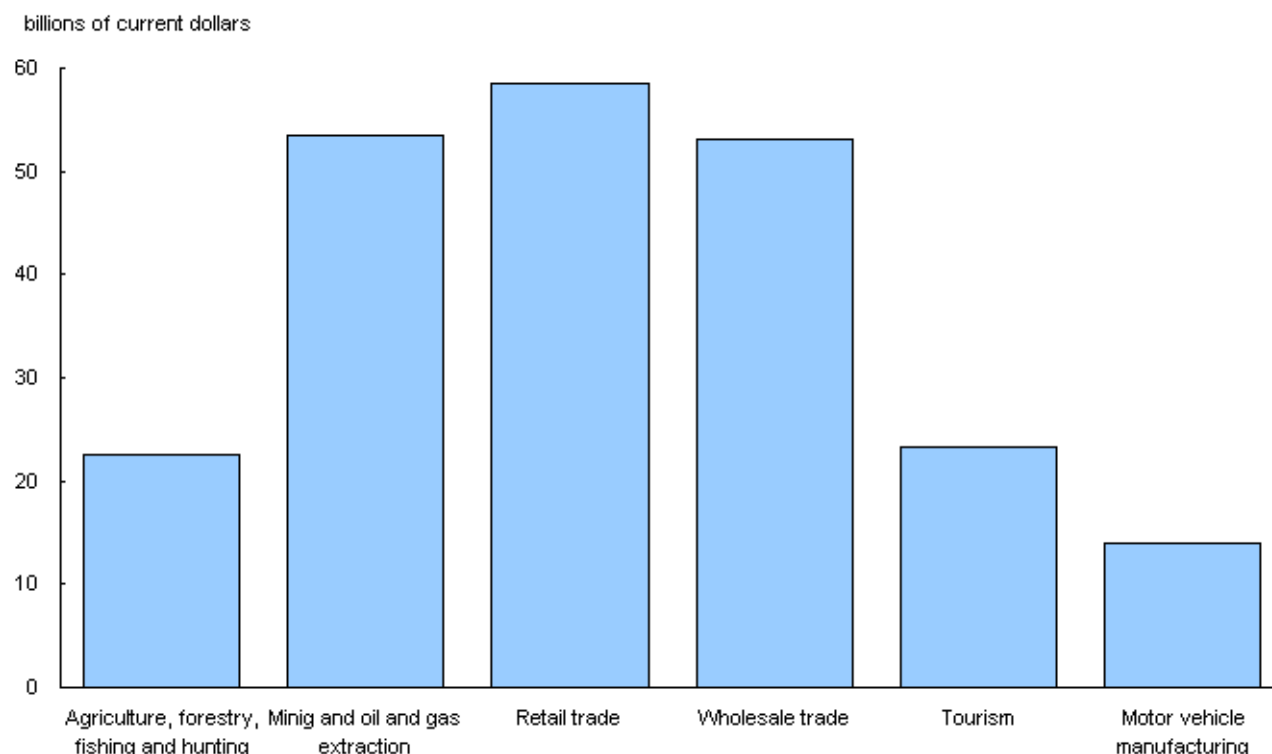
Graph 1 below shows how air transportation fared against total transportation in terms of tourism expenditure, GDP and jobs over the period 2000 to 2002. Its share of tourism GDP in transportation shrank almost 6 percentage points to 55.9%, while its share of tourism jobs fell four percentage points to 64.9%. At the same time, the share of tourism spending on passenger air transportation dropped three percentage points to 55% of the total for transportation. As measured by spending on vehicle fuel and vehicle repairs and parts, tourists substituted markedly towards the use of private automobiles. This mode of transport registered an increase of almost two percentage points in terms of its share of tourism spending on transportation.

Chart 1 Share of air transportation in total transportation, 2000 and 2002

Tourism remained an important part of the Canadian economy

Tourism remained an important part of the Canadian economy. Its contribution to overall GDP in 2002 (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.

One of the goals of the CTSA is to articulate the economic contribution of tourism as a whole. In Graph 2 below, the GDP of various industries is compared to the GDP attributable to tourism using the results from the CTSA (see Appendix 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.

Chart 2 Gross domestic product at basic prices, selected industries, Canada, 2002

Tourism employment edged up

Tourism contributed 3.9% of all jobs in Canada in 2002, accounting for 611,100 jobs. This was up marginally (+0.1%) from 2000. 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. Tourism accounted for 120,800 jobs in these 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.

Table 2 Tourism employment by industry, Canada

	Tourism employment		Growth	Distribution	
	2000	2002		2000	2002
	thousands of jobs		percentage		
Transportation	85.5	77.9	-8.9	14.0	12.8
Accommodation	159.4	160.5	0.7	26.1	26.3
Food and beverage services	143.2	144.7	1.0	23.5	23.7
Other tourism industries ¹	102.9	107.3	4.2	16.9	17.6
Total tourism industries	491.0	490.3	-0.1	80.5	80.2
Other industries ²	119.3	120.8	1.2	19.5	19.8
Total tourism employment	610.3	611.1	0.1	100.0	100.0

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 spending in Canada rose

Tourism demand in Canada reached \$56.5 billion in 2002, up 5.3% from 2000. Transportation recorded the largest share of spending, at \$19.6 billion or 34.6% of the total. At 16.7%, other tourism commodities (composed of recreation and entertainment, travel agency services and pre-trip expenses) had the third largest share of tourism expenditures in 2002. Accommodation spending increased 8.7% from its level in 2000 to reach \$9.0 billion, 15.9% of the total in 2002. Spending by Canadians travelling in Canada on non-tourism commodities (clothing, footwear, souvenirs, groceries, alcoholic beverages purchased at retail, etc.) increased by 15.6%, as these items took second place in terms of their share of total tourism spending.

Table 3 Tourism spending by commodity, Canada

	Tourism spending		Growth	Distribution	
	2000	2002		2000	2002
	millions of dollars			percentage	
Passenger transportation	19,981	19,553	-2.1	37.2	34.6
of which:					
passenger air transportation	11,597	10,761	-7.2	21.6	19.0
use of private vehicle	5,566	5,741	3.1	10.4	10.1
Accommodation	8,277	8,998	8.7	15.4	15.9
Food and beverage services	7,930	8,550	7.8	14.8	15.1
Other tourism commodities ¹	8,875	9,434	6.3	16.5	16.7
Total tourism commodities	45,063	46,535	3.3	83.9	82.3
Other spending ²	8,674	10,025	15.6	16.1	17.7
Total tourism expenditures	53,737	56,560	5.3	100.0	100.0

1. Includes spending on recreation and entertainment, travel agency services and pre-trip expenses.

2. Includes spending by tourists on non-tourism goods and services (groceries, alcoholic beverages purchased at retail, souvenirs, local public transportation, parking, etc.).

Table 4 Tourism demand in Canada

	Tourism spending		Growth	Distribution	
	2000	2002		2000	2002
	millions of dollars			percentage	
Domestic demand	35,925	38,444	7.0	66.9	68.0
of which:					
Canadians travelling in Canada	30,249	32,928	8.9	56.3	58.2
Canadians travelling abroad ¹	5,676	5,516	-2.8	10.6	9.8
International demand	17,812	18,116	1.7	33.1	32.0
Total tourism demand	53,737	56,560	5.3	100.0	100.0

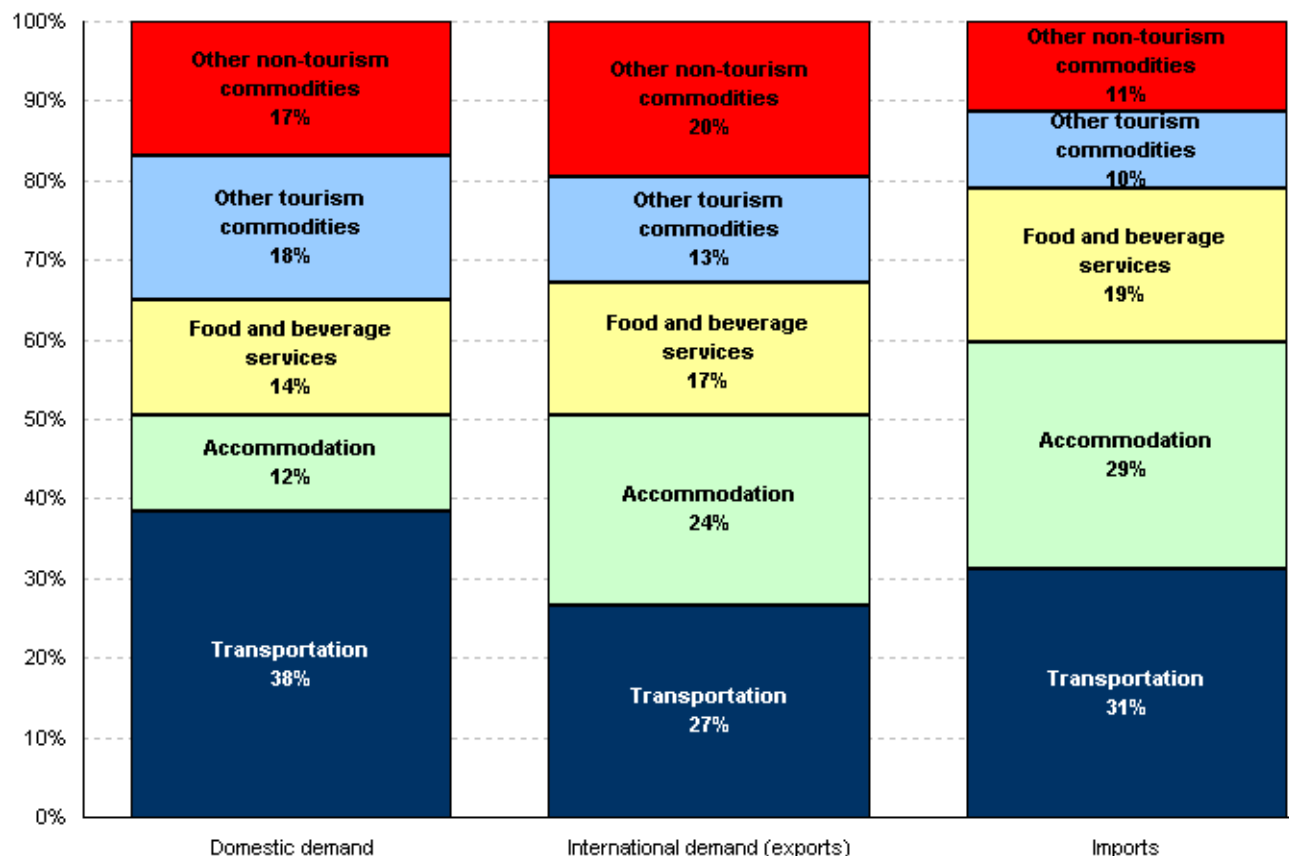
1. Includes non-fare spending by Canadians in Canada on a Canadian leg of an international trip as well as any fares paid if this international trip uses a Canadian carrier.

Domestic demand comprised two-thirds of tourism spending

Over two-thirds of tourism spending in 2002 was attributable to domestic demand, slightly higher than in 2000. Canadians spent \$38.4 billion on tourism in Canada, up 7.0% from 2000. This includes any non-fare spending by Canadians in Canada on a Canadian leg of an international trip as well as any fares paid if this international trip

uses a Canadian carrier.⁴ In 2002, 10% of tourism domestic demand was attributable to Canadians travelling on an international trip. As seen in Graph 3 below, the largest share of domestic spending was on transportation at \$14.7 billion or 38.3% of the total expenditure on tourism in Canada by Canadians. Other tourism commodities, composed of recreation and entertainment, travel agency services and pre-trip expenses, at 18.3% (or \$7.0 billion), had the second largest share of domestic tourism expenditures. Expenditures on accommodation had the lowest share, at 12.2%.

Chart 3 Tourism expenditures by commodity, Canada, 2002



International spending continued up

Non-residents accounted for \$18.1 billion of tourism spending in Canada, up 1.7% from 2000. Over half of this spending was on transportation and accommodation. Unlike Canadians travelling in Canada, who spent the least on accommodation, the tourist from outside Canada spent 26.6% on transportation and 23.9% on accommodation. They also differed from Canadian tourists in that they spent more on food and beverage services and more on "other commodities".

Tourism imports edged down

In 2002, Canadians travelling abroad spent \$20.6 billion, down 1.6% from 2000. Canadians spent more travelling outside Canada than foreigners spent in Canada. The tourism trade deficit was \$2.5 billion, an improvement from a deficit of \$3.1 billion in 2000. The tourism trade balance compares the amount Canadians spent abroad on tourism against what non-residents spent in Canada.

4. Fares paid by Canadians for international trips made using Canadian carriers are payments for a service that is produced domestically, and therefore are included in domestic demand.

Tourism contribution to tourism industries

Travel agency services are the most reliant on tourism insofar as 92.2% of the industry's economic activity comes from tourism. Other industries most affected are air transportation and accommodation. For air transportation, tourism accounted for 78.7% of the industry's GDP. It accounted for 66.4% of the economic activity of the accommodation industry. These shares may appear low, however, the air transportation industry includes freight services while the accommodation industry includes meals and alcohol served to local residents (non-tourists), which reduce the share due to tourism. The food and beverage industry with a 17.3% share of tourism GDP is the least reliant on tourism among the major tourism industries.

Tourism's contribution to "non-tourism industries"

Various industries not identified as "tourism industries" produce goods and services that are purchased by tourists (i.e., groceries, souvenirs and other retail goods). In 2002, tourists spent \$10.0 billion buying such goods and services (more than was spent on accommodation). This was up 15.6% from 2000.

In 2002, these "other industries" accounted for 23.2% of tourism GDP, up from 22.5% in 2000. Tourism generated 120,800 jobs in these industries.

Conclusion and future work

The CTSA measures the impact of tourism in the Canadian economy. It shows that in 2002 tourism continued to be an important part of the Canadian economy both in terms of output (GDP) and employment. Its economic contribution surpassed other important industries such as motor vehicle manufacturing. Tourism also benefited "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 study on government revenue attributable to tourism. The results from the CTSA 2002 have already been incorporated in the NTI and the study on government revenue, and will soon be integrated in the HRM (November 2007).

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. Indeed, recently, and recognizing in part this ever-changing environment, several recommendations were proposed for the TSA.⁵ These included updating of the concepts, definitions, commodities and industries to be included in the CTSA.

In 2005, for instance, a new domestic travel survey was implemented in Canada. This survey included a new operational definition of tourism, which has not yet been incorporated in the CTSA.⁶ In addition, 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.

5. See *Study of the Canadian Tourism Satellite Account: CTC Strategy Paper, Phase II*, Katharine Kemp and Shaila Nijhowne, May 31, 2005.

6. The new definition of tourism used in the Travel Survey of the Residents of Canada conducted by Statistics Canada has been changed to include all "out of town visits" overnight and same-day visits over 40 kilometers from home.

Appendix A Concepts and definitions used in the Canadian Tourism Satellite Account⁷

Concepts

The Canadian Tourism Satellite Account (CTSA) is based on the accounting principles of the System National Accounts. This internationally recognised system is an integrated framework of statistics that allows for the measurement of a country's economic production. It outlines the structure of the economy and the contribution of each industry.

Satellite accounts, such as the CTSA, have the structure and principles of the national accounts but are developed as an extension to the national accounts system - thus the name "satellite". The subject matter of the satellite account usually cannot be explicitly found in the core account 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 as measured by the SNA. With the Tourism Satellite Account, one can therefore answer the question, how important is tourism in Canada.

For the Tourism Satellite Account, the Input-Output (I-O) tables in the Canadian System of National Economic Accounts (CSNEA) are particularly important. These tables measure and analyse productive activity in the economy focusing on the producers and purchasers of commodities within the various industries. They show the total output and use of commodities by industries, as well as the primary costs (or inputs) associated with production of the commodities. However, tourism is not an industry identified within the CSNEA, as it is dependent on the consumer's purchases as a tourist, rather than on the production of certain goods and services. Constructing the CTSA, therefore, requires splitting industries into their tourism and non-tourism components. By aggregating the value added for the each tourism component, tourism GDP may be calculated.

Definitions

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".⁸ 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. For operational purposes, Canada has defined the concept of "outside the usual environment" as greater than 80 kilometres one way from home.⁹ Crossing an international border, however, is considered tourism no matter the distance travelled.

7. In this appendix, a brief description of the concepts and definition is presented. A comprehensive discussion of concepts, definitions, classifications as well as data sources and methods used to compile the CTSA is presented in the *Canadian Tourism Satellite Account Handbook*. (forthcoming December 2007).

8. 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, para. 2.1, p. 13.

9. The operational definition of tourism has changed since the reference year 2002. Beginning in 2005, the Canadian Travel Survey 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 www.statcan.ca.

In the TSA, 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, the term **tourist** is used to denote all visitors, whether they are same-day or overnight visitors.

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. Total tourism demand can be split into two components domestic demand, and international demand. **Domestic demand** includes the expenditures associated with tourism activity within Canada by Canadian residents. In the case of air transportation, the domestic portion of a flight destined to a location outside Canada is also included in domestic demand. **International demand**, also called **exports**, consists of the expenditures by non-residents in Canada on tourism. Business, government and personal tourism expenditures are included for all types of demand. The CTSA also calculates **international tourism imports** which are expenditures by Canadians outside Canada.

A **tourism commodity** is a good or service for which a significant part of its total demand 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. See Appendix C for the list of tourism commodities in the CTSA.

Tourism consists of a mix of industries and parts of industries and the various commodities they produce. An industry is a grouping of establishments that provide similar commodities to businesses and persons. A **tourism industry** is defined as one that would continue to exist only at a significantly reduced level of activity as a direct result of an absence of tourism. 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. See Appendix D for the list of tourism industries in the CTSA.

Another important definition in the construction of the CTSA is that of **tourism 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 I-O tables 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. For example, 100 units of a tourism commodity (i.e., accommodation services) is produced within a given economy (i.e., total tourism supply of accommodation services = 100). This tourism supply of accommodation services is available to be purchased both by tourists and non-tourists. If tourists purchase 90 units, tourism demand would equal 90 units and the commodity ratio (ratio of tourism demand to supply) for accommodation services would become 90% (90/100). The remaining 10% would be purchased by non-tourists.

The **tourism commodity ratio** is useful in identifying the proportion of a tourism commodity that is actually purchased by tourists. In this example, 90% of accommodation services are purchased by tourists. This ratio is also helpful in the data validation process especially in the reconciliation of demand and supply estimates, and in estimating the share of an industry’s employment that is generated by tourism.

Tourism GDP is defined as the unduplicated value of production, within the boundaries of a region (i.e. Canada), of goods and services 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. 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 CTSA. Tourism GDP is estimated using the sum of incomes (i.e., the returns to labour and capital from production) attributable to tourism. The components include wages and salaries, supplementary labour income, mixed income, other operating surplus (including profit and depreciation).

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 tourism 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.¹⁰

10. 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 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.

Appendix B Sources and methods for the Canadian Tourism Satellite Account¹¹

Data sources

Several main data sources are used for the CTSA. Demand estimates are derived from two main sources, the Canadian Travel Survey (CTS) and the International Travel Survey (ITS), both conducted by Statistics Canada. The CTS provides data for domestic business and personal tourism expenditure by province and territory. It also supplies information that identifies the reasons for visiting a region, the duration of stay and the activities undertaken while at the tourist location. The survey is a monthly supplement to the Labour Force Survey (LFS). The CTS provides totals for tourism expenditure, within a given region, as well as inter-provincially (inter-provincial exports and imports). The CTS, however, does not provide travel origin data for the territories, only travel destinations are available. Information from Statistics Canada's Survey of Household Spending (SHS) along with Input-Output supply data, are used to fill this gap. Estimates for pre-trip expenses, a portion of domestic demand, use trade and manufacturing data.

The ITS provides estimates for non-resident demand (separately for the US and other countries) within Canada as well as imports of tourism (Canadian spending abroad). This survey was initially conducted to provide data for Canada's Balance of Payments with other countries.

Estimates for tourism supply are derived from Statistics Canada's Input-Output tables; as are GDP and its components, labour income, mixed income and operating surplus. The Input-Output tables are constructed using several large matrices of data that record the inputs (what is needed to make a good or service) and output (the goods and services provided). The output table shows the supply of various commodities by industry and therefore tourism supply can be calculated using these data. The I-O tables also provide a matrix of value added or GDP. 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.

Methodology

The goal of the CTSA is to measure the economic activity of tourism, including tourism GDP, employment, demand and supply. To do this, the CTSA takes demand data from the travel surveys (i.e. the CTS and the ITS) and calculates its contribution to GDP and employment. However, the source data for tourism are dissimilar in that some are based on commodity detail while others are based on industry detail. That is, demand data from the CTS and ITS are built up using commodity details while GDP and employment data use industry breakdowns. Thus, a link needs to be made between commodities and industries. Supply, which can be calculated using either commodity or industry detail, is the linking factor between these variables. A demand/supply ratio, as discussed below, can be calculated for each commodity. This ratio is then moved into the industry framework so that tourism GDP and employment can be estimated using the information provided by the demand surveys.

Supply

The starting point for the calculation of supply is the I-O tables, which give a detailed accounting of all the industries in the economy and the commodities they supply. The first step is to discern the industries that supply tourism commodities to visitors (see appendix C for a complete list of tourism industries). However, the industry categories provided in the published Input-Output tables are not detailed enough for the CTSA¹². For example, the I-O tables display industry estimates only for the total food and beverage industry. The CTSA needs to split this

11. A summary of the sources and methods used in the CTSA is presented in this appendix. A comprehensive examination of data sources and methods used to compile the CTSA is presented in the *Canadian Tourism Satellite Account Handbook*. (forthcoming, December 2007).

12. Sometimes even at the Input-Output "W" or worksheet level (the most detailed level available for I-O data) the industry estimates are not detailed enough for use in the CTSA. In these cases, survey level data are used.

industry, using information from I-O detailed calculations, into sub-industries since some of these sub-industries may not be included in the tourism account. For example, two sub-industries within the food and beverage industry are take-out food restaurants and caterers. Take-out food restaurants are considered a tourism industry and their supply is included in the estimate. Caterers are omitted since they are a non-tourism industry. Similarly, only tourism commodities remain in the calculation of total supply. In other words, only those commodities in the take-out food industry that are purchased by tourists are retained (e.g. meals) while non-tourism commodities are taken out (e.g. royalties).

After the tourism sub-industries and tourism commodities have been identified, supply shares are calculated. The supply shares are equal to a sub-industry's portion of the total output for a commodity within an industry. For example, if two sub-industries each provided one half of an industry's supply of meals, then the supply shares would equal 50% for these commodities for each sub-industry. These shares are used later to allocate demand by industry. It should be noted that taxes are added to all supply estimates obtained from the I-O tables to move the data from producer prices to purchaser prices, thereby matching the pricing used for the demand data.

Demand

The calculation for tourism demand in the CTSA begins with the survey data in the CTS and the ITS. The first step is to split the existing commodity detail provided in the surveys into the detail used in the I-O tables in order to allow appropriate demand / supply reconciliation. For some commodities, the existing survey data does provide appropriate detail. For example, information for the transportation commodities is sufficient to split these commodities into their I-O counterparts. For accommodation, information on nights spent in different types of accommodation is available from the survey and is used to split the commodities into the I-O classifications. Personal expenditure data from the National Income and Expenditure Accounts are used to split the remaining commodities into the I-O framework.

Once tourism demand is calculated using the same commodities as supply, supply shares are used to allocate the demand into sub-industries. As mentioned above, if 50% of meals is supplied by a sub-industry, this sub-industry is also allocated 50% of demand. After the demand data are distributed across industries, demand/supply ratios are calculated for each industry. These ratios are simply the total tourism demand of an industry divided by its total tourism supply. This ratio indicates what portion of an industry's output is attributed to tourism activity. Thus, if an industry demand / supply ratio equals 40%, this share of the industry's total output comes from tourism. These demand/supply ratios are later used to calculate tourism GDP and employment.

To increase the analytical usefulness of the data, demand is split into domestic demand and non-resident demand (international demand or exports) using information from the CTS and ITS. Data are also calculated for international imports. The availability of both export and import data allows for the calculation of the tourism trade balance.

Several additions are made to the survey data to provide a more complete estimate of tourism demand (see Table B1). The first of these additions is to include the non-fare spending by Canadians on the Canadian leg of a trip destined outside the country (domestic portion of international trips). This spending is not included in the published CTS estimates. For example, in the case of a person flying to New York from Winnipeg through Toronto, the spending associated with the Winnipeg to Toronto portion of the trip is added to the published survey data. The second addition is to include the fares paid by Canadians on international trips made using Canadian carriers (Canadian fares of international trips). Since this service is produced domestically, it is included in domestic demand.

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 tables. 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 beverages¹³.

Table B1 Reconciliation of travel surveys and Canadian Tourism Satellite Account, tourism demand, Canada

	2002
	millions of dollars
Tourism expenditures as per Canadian travel survey and International travel survey	48,738
Domestic portion of international trips	365
Canadian fares of international trips	5,151
Domestic demand (territories)	124
Pre-Trip expenditures	2,015
Travel agent commissions	1,734
Demand to supply reconciliation	-1,566
Total adjustments	7,822
Total tourism demand (Canadian Tourism Satellite Account)	56,560

Pre-trip expenses or spending made by a traveller before a trip but for the sole purpose of travelling is another important addition made. These expenses include motor homes, travel and tent trailers, luggage and travel sets, tents and camping equipment and sleeping bags. The commodities included in pre-trip expenses were calculated using a supply and disposition method. Total exports of these goods were subtracted from total supply (including imports and items manufactured) of these items to obtain total disposition for Canada. Total units of each of these items were then multiplied by the appropriate Input-Output price to get total revenues for pre-trip expenses.

A special calculation is made in the CTSA for travel agency commissions which are not specifically identifiable in the travel surveys. This entails removing a fraction of the spending on various tourism commodities (e.g., air fares and hotel bills) and reallocating it to spending on services of travel agents. Essentially 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 final adjustment to the data arises from the demand/supply reconciliation. As commodities are reconciled between demand and supply, the tourism commodity ratio for a given commodity is examined. This ratio is at times considered too high or too low. This is particularly true for commodities for which little spending occurred. These issues were treated on a case-by-case basis. For example, suppose that after adding all relevant information for air transportation (information from the two travel surveys, the domestic portion of international trips, and the Canadian fares of international trips), total air transportation demand is 80% of total supply. The non-tourism exclusions to air travel demand could not account for this 20% difference. Therefore, the 80% total is adjusted upward to reflect a more realistic tourism commodity ratio for air transportation. In some cases, tourism demand can exceed supply for a given commodity. The supply and demand estimates are then examined to see which is of higher statistical quality and an adjustment is made based on this information.

Gross domestic product

Tourism GDP and its components, labour income, mixed income and other operating surplus, are obtained from the input table of the Input-Output tables. GDP is again calculated by sub-industry, just like supply either through information obtained for the sub-industries or, if no information existed, allocated by supply shares. The

13. 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.

tourism industry ratios are then used to calculate tourism GDP. In other words, if the tourism industry ratio for a given industry is 50%, one half of the industry's GDP is allocated to tourism. This method also allows for the calculation of tourism labour income, mixed income and operating surplus associated with tourism.

A special calculation is made to derive GDP for the "other industries". These "other industries" (such as retail trade) are defined as non-tourism industries, or industries that do not meet the criteria for tourism industries but obtain some benefit from it. In other words, they produce some commodities bought by tourists. These commodities include groceries, alcoholic beverages from stores, pre-trip expenses, motor vehicle parts and repair and motor vehicle fuel and some other miscellaneous commodities (e.g. toiletries). I-O personal expenditure data are used to distribute these values across I-O commodities. These data are then moved into an industry framework using shares of output for these commodities. The totals are then multiplied by input shares so that the GDP components can be isolated.

Employment

Like GDP, employment is calculated at the industry level. Therefore, the employment calculation uses the same tourism industry ratios as GDP to calculate the tourism portion of each industry. Thus, if the tourism industry ratio for an industry is 50%, half of this industry's employment is allocated to tourism. This calculation is done for all tourism-related industries and then the shares are summed to arrive at total tourism employment within Canada. As mentioned before, employment data by industry come from the Canadian Productivity Accounts of the CSNEA. The employment data are available only at an industry level too aggregated for the CTSA. Wages and salaries, from the GDP calculation, are used to allocate employment across the sub-industries.

Appendix C Tourism industries of the Canadian Tourism Satellite Account

North American Industry Classification System (NAICS) 2002¹⁴

Air transportation

- 4811 - Scheduled air transport
- 4812 - Non-scheduled air transport

Rail transportation

- 4821 - Rail transportation

Water transportation

- 4831 - Deep sea, coastal and Great Lakes water transportation
- 4832 - Inland water transportation

Bus transportation

- 4851 - Urban transit systems
- 4852 - Interurban and rural bus transportation
- 4854 - School and employee bus transportation
- 4855 - Charter bus industry
- 4859 - Other transit and group passenger transportation

Scenic and sightseeing transportation

- 4871 - Scenic and sightseeing transportation, land
- 4872 - Scenic and sightseeing transportation, water
- 4879 - Scenic and sightseeing transportation, other

Taxicabs

- 4853 - Taxi and limousine service

Vehicle rental and leasing

- 5321 - Automotive equipment rental and leasing

Hotels

- 7211 - Traveller accommodation (except 721114 - Motels and 721198 - All other traveller accommodation)

Motels

- 721114 - Motels

Camping

- 721211 - RV (recreational vehicle) parks and campgrounds

Other accommodation

- 721212 - Hunting and fishing camps
- 721213 - Recreational (except hunting and fishing) and vacation camps
- 721198 - All other traveller accommodation

14. NAICS 2002 replaces NAICS 1997 for 2002 onwards. Tourism industries were not affected by this change, which focussed on the information and technology sector.

Food and beverage services

- 7221 - Full-service restaurants
- 7222 - Limited-service eating places
- 7224 - Drinking places (alcoholic beverages)

Recreation and entertainment

- 51213 - Motion picture and video exhibition
- 7111 - Performing arts companies
- 7112 - Spectator sports
- 7115 - Independent artists, writers and performers
- 7121 - Heritage institutions
- 7131 - Amusement parks and arcades
- 7132 - Gambling industries
- 7139 - Other amusement and recreation industries

Travel services

- 5615 - Travel arrangement and reservation services

Appendix D Tourism commodities of the Canadian Tourism Satellite Account

Transportation

- Passenger air
- Passenger rail
- Passenger water
- Interurban, charter and tour bus
- Taxis
- Vehicle rental
- Vehicle repairs and parts
- Vehicle fuel

Accommodation

- Hotels
- Motels
- Camping
- Other accommodation (includes outfitters, commercial cabins and cottages)

Food and beverage services

- Meals from accommodation
- Meals from restaurants
- Alcoholic beverages from accommodation
- Alcoholic beverages from restaurants
- Meals and alcoholic beverages from other tourism industries

Other tourism commodities

- Recreation and entertainment
- Travel agency services
- Convention fees
- Pre-trip expenditures (include tents, camping goods, sleeping bags, luggage, travelsets, motor homes, trailers and semi-trailers of the caravan type for camping)

Non-tourism commodities purchased by tourists

- Groceries
- Beer, wine and liquor from stores
- Urban transit and parking
- Miscellaneous commodities (includes tobacco products, clothing, maps, and souvenirs)

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
Commodities						
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 of	Net income of	Other ¹	GDP at	Number	Labour	GDP	Tourism
	income unincorporated business	business	millions of dollars	basic prices	of jobs	compensation per job	per job	GDP ratio ²
					thousands	dollars	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	...
Minig 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.

Glossary

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

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 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 were 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 inter-provincial 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 SNEA. 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. The term "international traveller" is divided into three groups: non-resident traveller, resident traveller and other traveller.

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 Unemployment Insurance Fund and Workmen'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, a person-trip begins. It ends when the traveller returns to their usual environment.

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.

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.

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.

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 are expenditures by employers on their labour account which are regarded as compensation of employees. They include 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 or if it represents a significant expense category within visitors' budgets.

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 Tourism industry is an industry which as a direct result of the absence of tourism would cease to exist or would 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 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.

Reference documents

Barber-Dueck, Conrad and Demi Kotsovos. *Canadian Tourism Satellite Account, 2000*. Income and Expenditure Accounts Division, Technical Series, Catalogue no. 13-604 no. 48, Statistics Canada, Ottawa, October 2005.

Kemp, Katharine and Shaila Nijhowne. *Study of the Canadian Tourism Satellite Account: CTC Strategy Paper, Phase II*. Prepared for the Canadian Tourism Commission, Ottawa, May 2005.

Lapierre, Jocelyn and Duane Hayes, *The Tourism Satellite Account*. Income and Expenditure Accounts Division, Technical Series, Catalogue no. 13-604 no. 31, Statistics Canada, Ottawa, July 1994.

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

Statistics Canada. *Canadian Travel Survey, Domestic Travel, 2002* Culture, Tourism and the Center for Educational Statistics Division, Catalogue no. 87-212, Statistics Canada, Ottawa, September 2004.

_____. *Human Resource Module of the Tourism Satellite Account, Update to 2005*. Income and Expenditure Accounts Division, Catalogue no. 13-604 no. 55, Statistics Canada, March 2007.

_____. *The Input-Output Structure of the Canadian Economy, 2002-2003*. Input-Output Division, Catalogue no. 15-201, Statistics Canada, Ottawa, April 2007.

_____. *The Input-Output Structure of the Canadian Economy, 2000-2001*. Input-Output Division, Catalogue no. 15-201, Statistics Canada, Ottawa, March 2005.

_____. *International Travel, 2002*. Culture, Tourism and the Centre for Education Statistics Division, Catalogue no. 66-201, Statistics Canada, Ottawa, April 2004.

_____. *International Travel, 2000*. Culture, Tourism and the Centre for Education Statistics Division, Catalogue no. 66-201, Statistics Canada, Ottawa, November 2001.

_____. *National Income and Expenditure Accounts Quarterly Estimates Second Quarter 2007*. Income and Expenditure Accounts Division, Catalogue no. 13-009, Statistics Canada, Ottawa, September 2007.

_____. *National Tourism Indicators, Quarterly Estimates, Second Quarter 2007*. Income and Expenditure Accounts Division, Catalogue no. 13-009, Statistics Canada, Ottawa, September 2007.

Technical series

The Income and Expenditure Accounts Division Technical Series (13-604) provide background information as well as in depth analysis on data reported in any of the following accounts: Income and Expenditure Accounts, Provincial Economic Accounts, Financial Flow Accounts, National Balance Sheet Accounts, Labour Income and the National Tourism Indicators. A list of the papers currently available is presented below. These papers are available on our website at www.statcan.ca, by contacting us at (613) 951-3810, by email to lead-info-dcrd@statcan.ca or by writing to Client Services, IEAD, Statistics Canada, 21st floor R.H. Coats Building, 100 Tunney's Pasture Driveway, Ottawa, Ontario, K1A 0T6.

1. "Laspeyres, Paasche and Chain Price Indexes in the Income and Expenditure Accounts", reprinted from *National Income and Expenditure Accounts*, fourth quarter 1988.
2. "Technical Paper on the Treatment of Grain Production in the Quarterly Income and Expenditure Accounts", reprinted from *National Income and Expenditure Accounts*, first quarter 1989.
3. "Data Revisions for the Period 1985-1988 in the National Income and Expenditure Accounts", reprinted from *National Income and Expenditure Accounts*, first quarter 1989.
4. "Incorporation in the Income and Expenditure Accounts of a Breakdown of Investment in Machinery and Equipment", reprinted from *National Income and Expenditure Accounts*, third quarter 1989.
5. "New Provincial Estimates of Final Domestic Demand at Constant Prices", reprinted from *National Income and Expenditure Accounts*, fourth quarter 1989.
6. "Real Gross Domestic Product: Sensitivity to the Choice of Base Year", reprinted from *Canadian Economic Observer*, May 1990
7. "Data Revisions for the Period 1986-1989 in the National Income and Expenditure Accounts", reprinted from *National Income and Expenditure Accounts*, first quarter 1990.
8. "Volume Indexes in the Income and Expenditure Accounts", reprinted from *National Income and Expenditure Accounts*, first quarter 1990.
9. "A New Indicator of Trends in Wage Inflation", reprinted from *Canadian Economic Observer*, September 1989.
10. "Recent Trends in Wages", reprinted from *Perspectives on Labour and Income*, winter 1990.
11. "The Canadian System of National Accounts Vis-à-Vis the U.N. System of National Accounts", reprinted from *National Income and Expenditure Accounts*, third quarter 1990.
12. "The Allocation of Indirect Taxes and Subsidies to Components of Final Expenditure", reprinted from *National Income and Expenditure Accounts*, third quarter 1990.
13. "The Treatment of the GST in the Income and Expenditure Accounts", reprinted from *National Income and Expenditure Accounts*, first quarter 1991.
14. "The Introduction of Chain Volume Indexes in the Income and Expenditure Accounts", reprinted from *National Income and Expenditure Accounts*, first quarter 1991.
15. "Data Revisions for the Period 1987-1990 in the National Income and Expenditure Accounts", reprinted from *National Income and Expenditure Accounts*, second quarter 1991.
16. "Volume Estimates of International Trade in Business Services", reprinted from *National Income and Expenditure Accounts*, third quarter 1991.
17. "The Challenge of Measurement in the National Accounts", reprinted from *National Income and Expenditure Accounts*, fourth quarter 1991.
18. "A Study of the Flow of Consumption Services from the Stock of Consumer Goods", reprinted from *National Income and Expenditure Accounts*, fourth quarter 1991.

19. "The Value of Household Work in Canada, 1986", reprinted from *National Income and Expenditure Accounts*, first quarter 1992.
20. "Data Revisions for the Period 1988-1991 in the National Income and Expenditure Accounts", reprinted from *National Income and Expenditure Accounts*, Annual Estimates, 1980-1991.
21. "Cross-border Shopping - Trends and Measurement Issues", reprinted from *National Income and Expenditure Accounts*, third quarter 1992.
22. "Reading Government Statistics: A User's Guide", reprinted from *Policy Options*, Vol. 14, No. 3, April 1993.
23. "The Timeliness of Quarterly Income and Expenditure Accounts: An International Comparison", reprinted from *National Income and Expenditure Accounts*, first quarter 1993.
24. "National Income and Expenditure Accounts: Revised Estimates for the period from 1989 to 1992", reprinted from *National Income and Expenditure Accounts*, Annual Estimates, 1981-1992.
25. "International Price and Quantity Comparisons: Purchasing Power Parities and Real Expenditures, Canada and the United States", reprinted from *National Income and Expenditure Accounts*, Annual Estimates, 1981-1992.
26. "The Distribution of GDP at Factor Cost by Sector", reprinted from *National income and Expenditure Accounts*, third quarter 1993.
27. "The Value of Household Work in Canada, 1992", reprinted from *National Income and Expenditure Accounts*, fourth quarter 1993.
28. "Assessing the Size of the Underground Economy: The Statistics Canada Perspective", reprinted from *Canadian Economic Observer*, May 1994.
29. "National Income and Expenditure Accounts: Revised Estimates for the period from 1990 to 1993", reprinted from *National Income and Expenditure Accounts*, first quarter 1994.
30. "The Canadian National Accounts Environmental Component: A Status Report", reprinted from *National Income and Expenditure Accounts*, Annual Estimates, 1982-1993.
31. "The Tourism Satellite Account", reprinted from *National income and Expenditure Accounts*, second quarter 1994.
32. "The 1993 International System of National Accounts: Its implementation in Canada", reprinted from *National Income and Expenditure Accounts*, third quarter 1994.
33. "The 1995 Revision of the National Economic and Financial Accounts", reprinted from *National Economic and Financial Accounts*, first quarter 1995.
34. "A Primer on Financial Derivatives", reprinted from *National Economic and Financial Accounts*, first quarter 1995.
35. "The Effect of Rebasings on GDP", reprinted from *National Economic and Financial Accounts*, second quarter 1996.
36. "Purchasing Power Parities and Real Expenditures, United States and Canada - An Update to 1998", reprinted from *National Income and Expenditure Accounts*, third quarter 1999.
37. "Capitalization of Software in the National Accounts", *National Income and Expenditure Accounts technical series*, February 2002.
38. "The Provincial and Territorial Tourism Satellite Accounts for Canada, 1996", *National Income and Expenditure Accounts technical series*, April 2002.
39. "Purchasing Power Parities and Real Expenditures, United States and Canada", reprinted from *National Income and Expenditure Accounts*, first quarter 2002.

40. "The Provincial and Territorial Tourism Satellite Accounts for Canada, 1998", *National Income and Expenditure Accounts technical series*, June 2003.
41. "Government revenue attributable to tourism, 1998", *National Income and Expenditure Accounts technical series*, September 2003.
42. "Chain Fisher Index Volume Methodology", *National Income and Expenditure Accounts*, November 2003.
43. "Trends in provincial and territorial economic statistics: 1981-2002", *National Income and Expenditure Accounts*, November 2003.
44. "The 1997-2003 Revisions of the National Tourism Indicators", *National Income and Expenditure Accounts*, October 2004.
45. "A study of data revisions to the National Tourism Indicators", *National Income and Expenditure Accounts*, October 2004.
46. "Provincial and Territorial Economic Accounts", *National Income and Expenditure Accounts*, November 2004.
47. "Revisions to the Canadian National Tourism Indicators", *National Income and Expenditure Accounts*, January 2005.
48. "Canadian Tourism Satellite Accounts, 2000", *National Income and Expenditure Accounts technical series*, October 2005.
49. "Trends in Saving and Net Lending in the National Accounts", reprinted from *National Income and Expenditure Accounts*, third quarter 2005.
50. "Recent Trends in Corporate Finance: Some Evidence from the Canadian System of National Accounts", reprinted from *National Income and Expenditure Accounts*, fourth quarter 2005.
51. "Human Resource Module of the Tourism Satellite Account, 1997-2002", *National Income and Expenditure Accounts technical series*, March 2006.
53. "Purchasing Power Parities and Real Expenditures, United States and Canada, 1992-2005", *National Income and Expenditure Accounts technical series*, February 2007.
54. "Recent Trends in Output and Employment", *National Income and Expenditure Accounts technical series*, February 2007.
55. "Human Resource Module of the Tourism Satellite Account, Update to 2005", *National Income and Expenditure Accounts technical series*, March 2007.
57. "Government Revenue Attributable to Tourism, 2000 to 2006", *National Income and Expenditure Accounts technical series*, September 2007.