

Catalogue no. 13-604-M — no. 066  
ISSN 1707-1739  
ISBN 978-1-100-15669-9

## Research Paper

Income and Expenditure Accounts Technical Series

# Human Resource Module of the Tourism Satellite Account, 2009

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



Statistics Canada  
Statistique Canada

Canada

# Human Resource Module of the Tourism Satellite Account, 2009

This paper reports on the Human Resource Module of the Tourism Satellite Account, 2009 developed by Statistics Canada. This study provides detailed information on employment related to tourism in Canada. Information on wages and salaries, number of jobs and hours worked by occupation are included. The data are also disaggregated by age, gender and immigration status. This study provides a resource for training and planning for tourism in Canada.

This study was prepared by Monique Bisailon of the Research and Development Projects and Analysis Section, Income and Expenditure Accounts Division, Statistics Canada. The study was funded through a partnership agreement with the Canadian Tourism Human Resource Council.

**Ottawa  
May 2010**

Catalogue no. 13-604-M no. 66  
ISSN 1707-1739  
ISBN 978-1-100-15669-9

Catalogue no. 13-604-MPB no. 66  
ISSN 1707-1720  
ISBN 978-1-100-51539-7

Published by authority of the Minister responsible for Statistics Canada

© Minister of Industry, 2010

La version française de cette publication est disponible (n° 13-604-M n° 66 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.

## **Standards of service to the public**

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, Statistics Canada has developed standards of service that its employees observe. To obtain a copy of these service standards, please contact Statistics Canada toll-free at 1-800-263-1136. The service standards are also published on [www.statcan.gc.ca](http://www.statcan.gc.ca) under "About us" > "The agency" > "Providing services to Canadians."

## Table of contents

Highlights .....	5
1. Introduction .....	6
2. Scope of study .....	6
3. Changes to methodology .....	7
4. Revisions .....	8
5. Results .....	8
5.1 Tourism sector .....	9
5.2 Tourism industry profiles .....	11
5.3 Occupations in tourism industries .....	14
5.4 Profile of employees in tourism industries .....	15
6. Conclusion and future work .....	17
Data tables .....	18
Table 1 Gross domestic product, tourism gross domestic product, tourism expenditures and jobs in tourism industries and total economy, Canada, 2003 to 2009 .....	19
Table 2 Annual compensation and hourly compensation in tourism industries and total economy, Canada, 2003 to 2009 .....	20
Table 3 Jobs in tourism industries and total economy, Canada, 2003 to 2009 .....	21
Table 4 Weekly hours worked in tourism industries and total economy, Canada, 2003 to 2009 .....	22
Table 5 Employee jobs, hours and wages by employee characteristics in tourism industries, Canada, 2009 .....	23
Appendix A: Accounting framework .....	24
Appendix B: Concepts and definitions .....	25
Appendix C: Data sources .....	27
Appendix D: Methodology .....	30
Appendix E: Tourism industries in the Human Resource Module .....	32
Appendix F: Tourism occupations in the Human Resource Module .....	35
Appendix G: Table structure .....	38
Glossary of terms .....	39
References .....	42
Technical series .....	45

## 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<sup>s</sup>** 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

## Highlights

- Tourism industries in the Human Resource Module (HRM) include five industry groups which are defined as follows: transportation, accommodation, food and beverage services, recreation and entertainment and travel services. Generally speaking, an industry is considered a tourism industry if it would cease to exist, or continue to exist only at a significantly reduced level of activity, as a direct result of the absence of tourism.
- The HRM provides the following three main human resource statistics for the tourism sector as a whole and for each tourism industry group: jobs, hours and compensation. These statistics are available by gender, work status, by age group, by immigrant status and by occupation.
- All statistics provided by the HRM are related to production in tourism industries. For example, statistics concerning jobs are about the number of jobs required to produce commodities in tourism industries whether the commodities are consumed by visitors or non-visitors, that is, local residents.
- With this update, it was possible to produce annual estimates from 1997 up to and including 2009 for Canada over a 13 year period. This constitutes an improvement in timeliness of data production. The data can now be published six months after the reference period.
- In 2009, the tourism sector in Canada accounted for 1.6 million jobs, that is, 9.4% of all jobs in Canada. In 1997, the tourism sector accounted for a larger proportion, 9.9% of all jobs. Jobs in tourism declined twice in the period covered: they dropped 1.7% (27,000) in 2005 and fell 0.6% (10,000 jobs) in 2009.
- In 2009, the food and beverage services industry group was the largest employer among tourism industries with more than 50% of all tourism jobs (853,000 jobs). The second largest employer was recreation and entertainment with 274,000 jobs, followed by accommodation with 222,000 jobs. The transportation industry group was responsible for 214,000 jobs, while travel services provided 45,000 jobs.
- Working hours were shorter in tourism industries in Canada compared to jobs economy-wide. The shorter work week is explained by the higher proportion of part-time jobs in tourism.
- From 1997 to 2009, hourly compensation was always lower in the tourism sector than economy-wide in Canada, but the gap widened, particularly in 2003.
- Food-counter attendants and kitchen helpers and related occupations were the single largest occupation in the tourism sector with 245,000 jobs. Almost all of these jobs (224,000) were in the food and beverage services industry group. In the accommodation industry group, the most prevalent occupation was light duty cleaners with 45,000 jobs. Bus drivers and subway and other transit operators were the main occupation in other transportation industries with 44,000 jobs, while program leaders and instructors in recreation, sport and fitness were the most common occupation in recreation and entertainment with 34,000 jobs. Travel counsellors were the main occupation in travel services, but accounted for only 21,000 jobs.
- Two tourism industry groups in Canada had a notably older workforce: 62% of employees in other transportation and 43% of employees in travel services were aged 45 years and over.
- On an hourly basis, immigrants were paid less than non-immigrants in the tourism sector, but on annual basis, immigrants earned more (\$29,337 for immigrants versus \$25,572 for non-immigrants) because they worked more hours.

## 1. Introduction

The aim of the Human Resource Module (HRM) is to provide timely and reliable statistics on the human resource dimension of tourism.

Both the Canadian Tourism Satellite Account (CTSA) and the National Tourism Indicators (NTI) already carry some information on the number of jobs generated by tourism at the national level.<sup>1</sup> The HRM complements and enhances the analytical capacity provided by the CTSA and the NTI, allowing for a broader insight into tourism's role in the economy by providing more detailed human resource information.

For example, human resource planning involves all persons working in tourism industries regardless of whether their job comes directly from serving a visitor or from serving a local resident. Consequently, the total number of jobs in tourism industries is a major focus of the HRM and is much broader than the CTSA and the NTI, which portray only the jobs directly attributable to visitor spending. In addition, some outputs of tourism industries are considered non-tourism commodities because tourism is not a significant source of their demand. Nevertheless, their production generates jobs in tourism industries, and these jobs are included in the overall human resource planning for tourism industries.

The HRM serves as a useful planning and forecasting tool for policy makers in the tourism, employment and training areas. Various tourism-affiliated agencies, academics, and decision-makers in tourism use it for research and analysis, planning and development. An extension to the provincial level has also been started,<sup>2</sup> to make the HRM more relevant to these audiences, for similar purposes.

Outlining the rest of the report, the scope of the study is described in the next section, followed by a discussion of changes to the methodology and an explanation of revisions to the data. Selected results are then discussed to demonstrate analytical uses of the HRM. Conclusions and future work are discussed in the last section, followed by a selection of relevant data tables.

Appendices A and B discuss the accounting frameworks behind the HRM, key tourism concepts and definitions from the CTSA, and various labour concepts and definitions from the Canadian System of National Accounts (CSNA). Appendix C summarizes the data sources and Appendix D outlines the general methodology used. Appendix E provides a list of North American Industrial Classification System (NAICS) industries included in the industry groups used by the HRM, while Appendix F lists the occupations used by the HRM from the National Occupational Classification for Statistics (NOC-S). A summary of the tables available upon request in the HRM is included in Appendix G. A glossary of terms and a list of references are also provided.

## 2. Scope of study

The HRM provides a snapshot of the tourism industries and occupations they comprise as well as insights into trends over time. Analyses can be made on the following key statistics: jobs, hours worked and employment earnings starting from 1997. Derived variables, such as number of full-time equivalents, average hourly earnings and average annual hours worked per job can also be examined.

These key statistics can be analyzed according to various characteristics of the jobs (employee or self-employed, full-time or part-time, occupation group) and the characteristics of the persons holding them (gender, age group, immigrant status). Information by occupation is also available. Comparisons can be made to the

---

1. Some provincial information on the number of jobs generated by tourism was provided in Barber-Dueck and Kotsovos 2003.

2. See Bisailon 2010.

Canadian System of National Accounts (CSNA) employment estimates for the overall economy and for selected industries as well as Canadian Tourism Satellite Accounts (CTSA) and National Tourism Indicators (NTI) aggregates.

The scope of this study is similar to the previous national study<sup>3</sup> with the addition of two years of data: 2008 and 2009. The information on the number of jobs, hours worked and employment earnings is presented for the same industry groups as before including for full-time and part-time jobs. The information is also available according to the same characteristics of employees (gender, age group and immigrant status) and similar occupations.

In particular, the HRM for Canada provides annual estimates for the years 1997 up to 2009. These estimates are based on national data from the Canadian Productivity Accounts (CPA),<sup>4</sup> which is a key input to the HRM, as well as Labour Force Survey data (LFS). Census data for 2001 and 2006 are incorporated. The North American Industrial Classification System (NAICS) of 2002 and the National Occupational Classification for Statistics (NOC-S) of 2006 are used.

### 3. Changes to methodology

With this update, it was possible to improve the timeliness of the data by streamlining the compilation of HRM statistics. The data can now be published approximately six months after the reference period rather than 18 months. Consequently, estimates are provided up to and including 2009, an addition of two years of data instead of one year.

With this release of the HRM, the methodology for estimating the labour portion of mixed income for self-employed jobs was updated. Up until now, it was assumed that the self-employed received the same hourly labour income (that is, wages and salaries plus supplementary labour income (SLI)) as paid employees on average. SLI is composed of employer contributions to private and public sector pension plans, employment insurance, Canada and Quebec pension plans, health and life insurance, workers compensation and retirement allowances. Currently, self-employed must contribute only to Canada and Quebec pension plans. In 2007, these contributions accounted for only 21.3% of total SLI.<sup>5</sup> In addition, many uninsured employees qualify for Employment Insurance (EI) sickness and maternity benefits, the self-employed do not.<sup>6</sup>

Other benefit programs or plans are available to the self-employed on a voluntary basis but not on the same terms and for the same price as the programs offered to employees. Few self-employed take advantage of these benefits.<sup>7</sup>

---

3. See Bisailon and Morissette 2009.

4. See Statistics Canada 2009.

5. Statistics Canada. 2010. Custom tabulation of supplementary labour income using 2007 data.

6. Contributions to employment insurance by the self-employed are possible, on a voluntary basis, as of January 30, 2010. However, the self-employed can start withdrawing benefits only in 2011.

7. The Survey of Labour and Income Dynamics showed that in the year 2000, about 50% of employees had coverage in an extended health insurance plan, a disability plan, or a health plan, almost three times the proportion (17%) of coverage for the self-employed. For more details see Akyeampong and Sussman 2003. The self-employed also tend to participate less in RRSPPs. For example in 1996, 35% of the self-employed purchased an RRSPP compared with 43% of employees. For more details see Akyeampong 1999.

As result, with this update, it is assumed that the labour portion of mixed income for the self-employed is equal to wages only and excludes SLI, which is consistent with the CPA.<sup>8</sup> Excluding SLI in the calculation of the labour portion of mixed income for the self-employed has lowered self-employed hourly compensation in the tourism sector between \$1.15 and \$1.80 per hour from 1997 to 2007. This change reduced overall hourly compensation in the tourism sector between \$0.12 and \$0.15 per hour over the same period.

Self-employed hourly compensation in tourism industries is now closer to self-employed hourly compensation economy-wide, but the assumptions used to calculate the estimates are not equivalent in all cases. The calculation used in the HRM is identical to that in the CPA, except in the case where the imputed labour portion of mixed income for the self-employed exceeds the estimated mixed income for the industry. In this case, in the CPA, the estimate of the labour portion of mixed income for the self-employed is reduced to match the mixed income.<sup>9</sup>

## 4. Revisions

As mentioned in the previous section, with this update, two new years of data are provided: 2008 and 2009. However, data for the period 1997 to 2007 have also been revised. The purpose of this section is to outline and explain the main revisions to the data.

While jobs for the total economy have not changed over the period 1997 to 2007, jobs in tourism industries have been revised downward by 21,000 jobs in 2006 and downward by 54,000 jobs in 2007. Jobs were lowered mainly in the food and beverage services industries and to a lesser extent in the accommodation industries.

The downward revisions stem from changes in the Canadian Productivity Accounts (CPA), which in turn come from two main sources:<sup>10</sup>

- The Canadian System of National Accounts 2005 final and 2006 preliminary Input-Output tables were published in December 2009. This explains the revisions to jobs in 2006.
- T4 data for the year 2007 were incorporated, creating revisions to jobs of 2007.

Weekly hours per job, for both the total economy and the tourism sector, have not changed over the 1997 to 2007 period. Hourly compensation for the total economy was unchanged over the same period. However, hourly compensation in tourism industries is between 12 to 15 cents lower per hour over the same period compared to the last HRM. This stems from the change in the calculation of the labour portion of mixed income for the self-employed, mentioned earlier.

## 5. Results

The intent of this section is to highlight some of the findings and to illustrate some of the types of analyses the HRM can support. The analysis will focus on the year 2009 and on comparisons with preceding years. A brief description of the general economic conditions prevailing in Canada and in the tourism sector in 2009 is provided first. This description is used as background for the subsequent analyses in sections 5.1 to 5.4.

---

8. The CPA excludes SLI from the labour portion of mixed income for the self-employed.

9. The CPA approach assumes that the return to capital cannot be negative. The HRM does not make this assumption.

10. See Statistics Canada 2009.



Real GDP fell 2.9% in 2009 in Canada following a 0.6% gain in 2008 (see Table 1). Exports dropped 14% and final domestic demand recorded a 1.7% decline, largely due to a 17% drop in business investment in plant and equipment. Since 1961, the only other annual declines in real GDP were recorded in 1982 (-2.9%) and 1991 (-2.1%).<sup>11</sup>

Tourism spending in Canada in tourism industries declined 2.6% in real terms in 2009 (compared to a growth of 2.0% in 2008), as spending by international visitors fell 9.5% and tourism spending by Canadians at home declined 0.6%.<sup>12</sup> This was the first annual decline in domestic tourism spending since 1991. Three factors help explain this lower spending:

- the new Western Hemisphere Travel Initiative (WHTI) travel rules that came into effect June 1, requiring all persons entering the United States to have either a passport, NEXUS card, or an enhanced driver's license
- Canadians cutting back on both their business and leisure travel with the downturn in economic conditions in late 2008
- the outbreak of the H1N1 influenza virus in Mexico in April of 2009.

## 5.1 Tourism sector

This section aims to compare key variables of the HRM: jobs, hours worked and compensation for the tourism sector in Canada with the overall economy over time.

### Compensation for all jobs

Compensation<sup>13</sup> reached \$47.6 billion in 2009 for tourism industries in Canada, up 0.3% from the previous year, outpacing the 0.1% growth of compensation for the total economy (see Table 2). This growth was mainly due to increases in hourly compensation (+3.3%) however, as jobs (-0.6%) and hours worked (-2.3%) both declined.

Since 1999, tourism industries have lost some ground compared to the economy when looking at compensation for all jobs. In 1999, compensation in tourism accounted for 6.2% of compensation for all jobs in Canada. By 2009, this share was down to 5.6%.

In 2000 and 2001 and from 2003 to 2006, the growth rate of compensation in tourism was lower than for the economy, notably lower in 2003 and 2005. Slower growth in 2003 stemmed from the decline in wages in tourism that year. In 2005, slower growth came mainly from the decline in jobs in tourism and also from sluggish growth in wages.

### Jobs

Tourism industries in Canada generated a total of 1.6 million jobs in 2009. Jobs include both full-time and part-time jobs, as well as employee jobs and jobs from self-employment. The tourism sector accounted for 9.4% of all jobs in Canada in 2009. In 1999, it accounted for 10.0% of all jobs (see Table 3).

In 2000, jobs in tourism industries started to grow at a slower pace than in the overall economy (see Chart 1). In 2005, jobs in the tourism sector declined 1.7% or 27,000 jobs (mainly in the recreation and entertainment industry group), while they grew 1.6% economy-wide. In 2005, the tourism sector was hit by several one time events: the National Hockey League lockout, the departure of the Montreal Expos, and the spike in the energy prices after the Hurricane Katrina. A major restructuring in the air transportation industries also took place in 2005.

11. See Statistics Canada 2010a.

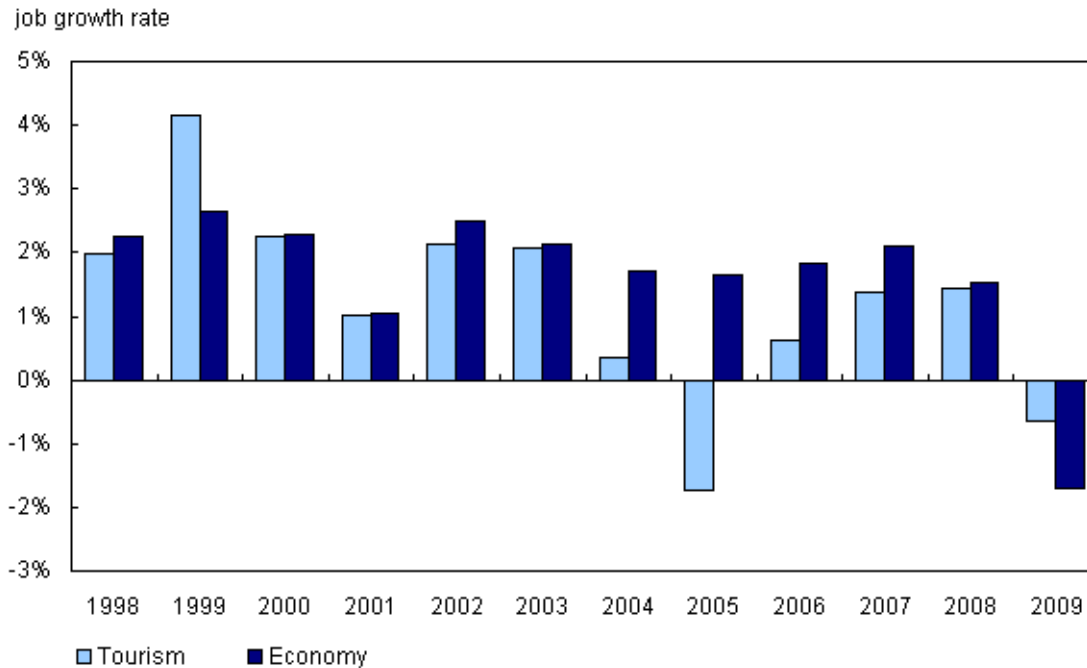
12. Data adjusted to exclude tourism commodities produced in non-tourism industries. For more details see Statistics Canada 2010b.

13. Compensation is defined as wages and salaries, supplementary labour income and the labour portion of income after expenses accruing to the self-employed.

In 2009, jobs in tourism industries declined 0.6%, a smaller decline than for all industries in Canada (-1.7%). A net 10,000 jobs were lost in tourism industries in 2009: 12,000 full-time jobs disappeared but 2,000 part-time jobs were created. Jobs were lost mainly in food and beverage services (-5,000) and other transportation (-3,000).

The global economic slowdown and the H1N1 flu epidemic were the main one time events that affected tourism in Canada in 2009. The new Western Hemisphere Travel Initiative (WHTI) travel rules that came into effect June 1, 2009 also played an important role.

**Chart 1**  
**Annual rate of job growth in the tourism sector and the total economy, Canada, 1998 to 2009**



It should be noted that the measure of jobs in the HRM includes all jobs required to produce commodities in tourism industries, whether they are consumed by visitors or by local residents (non-visitors). This exceeds the measure in the CTSA and the NTI of jobs attributed to visitor's consumption (spending or demand), because only a portion of the 1.6 million jobs can be attributed to visitors. Jobs generated by tourism or visitor's consumption in tourism industries totalled 521,000 jobs in 2009.<sup>14</sup>

In 2009, jobs in tourism generated by visitor's consumption (tourism demand) declined 2.2%. However, jobs in tourism industries generated from both visitor and local resident's consumption were not affected as much (-0.6%) because of sustained local consumption.

Part-time jobs were twice as prevalent in tourism industries (40.2%) compared to all industries in Canada (22.7%). In 2009, four out of ten jobs in the tourism sector were part-time. In 1997, part-time jobs in tourism (38.0%) were less prevalent.

14. See Statistics Canada 2010b.

Self-employment was less common in tourism, accounting for 7.0% of tourism jobs in 2009, compared to 9.4% economy-wide. In 1997, self-employment in tourism supported 8.5% of jobs in tourism.

### Hours worked per job

The average work week in the tourism sector is shorter than in the rest of the economy, about 10% shorter from 1997 to 2009. In 2009, the work week in tourism was 29.0 hours per week, down 2.3% from the previous year, compared to 32.7 hours in the total economy (see Table 4).

The shorter week in tourism reflects the higher proportion of part-time jobs found in tourism industries than economy-wide and the lower proportion of self-employed in tourism. Jobs from self-employment in tourism involved longer working hours (34.7 hours per week), compared to jobs from self-employment economy-wide (32.8 hours per week).

### Compensation per job

Hourly compensation in tourism was \$19.59 per hour in 2009, up 3.3% from the previous year (see Table 2), but still much lower than the hourly compensation economy-wide of \$29.56.<sup>15</sup> In 2003, hourly compensation dropped by \$0.30 in tourism (mainly in recreation and entertainment and food and beverage services industries) compared to an increase of \$0.69 economy-wide. This deterioration in the relative hourly compensation in tourism had not been recuperated by 2009, even though hourly compensation in tourism had increased.

## 5.2 Tourism industry profiles

The HRM contains aggregated data for five tourism industry groups: transportation (with details for air transportation and other transportation reported separately), accommodation, food and beverage services, recreation and entertainment and travel services. Appendix E lists the industries included in each industry group of the tourism sector. The following provides selected results intended to give an indication of the kinds of industry analyses possible with the HRM.

### Food and beverage services

Among the tourism industry groups, the food and beverage services industry group was the largest employer in 2009. With 853,000 jobs (see Table 3), food and beverage services accounted for 53.0% of all jobs in tourism industries in Canada. This industry has gained slightly in terms of its share of jobs in the sector over the years. In 1997, it held a smaller share, 51.7% of total jobs in the sector. In 2009, this industry group registered a decrease of 4,000 jobs (-0.5%). Full-time jobs were lost, but some part-time jobs were created.

Food and beverage services held the highest share of part-time jobs, almost 50%, among tourism industries in Canada. Not surprisingly, the work week in this industry, at 27.2 hours, was the shortest among all tourism industries and was below the average work week of 32.7 hours economy-wide (see Table 4).

In 2009, the self-employed held 25,000 jobs in food and beverage services, accounting for 22.0% of all self-employed jobs in the tourism sector. They worked the longest hours, 42.9 hours per week, well above the self-employed average of 34.7 hours per week in the tourism sector.

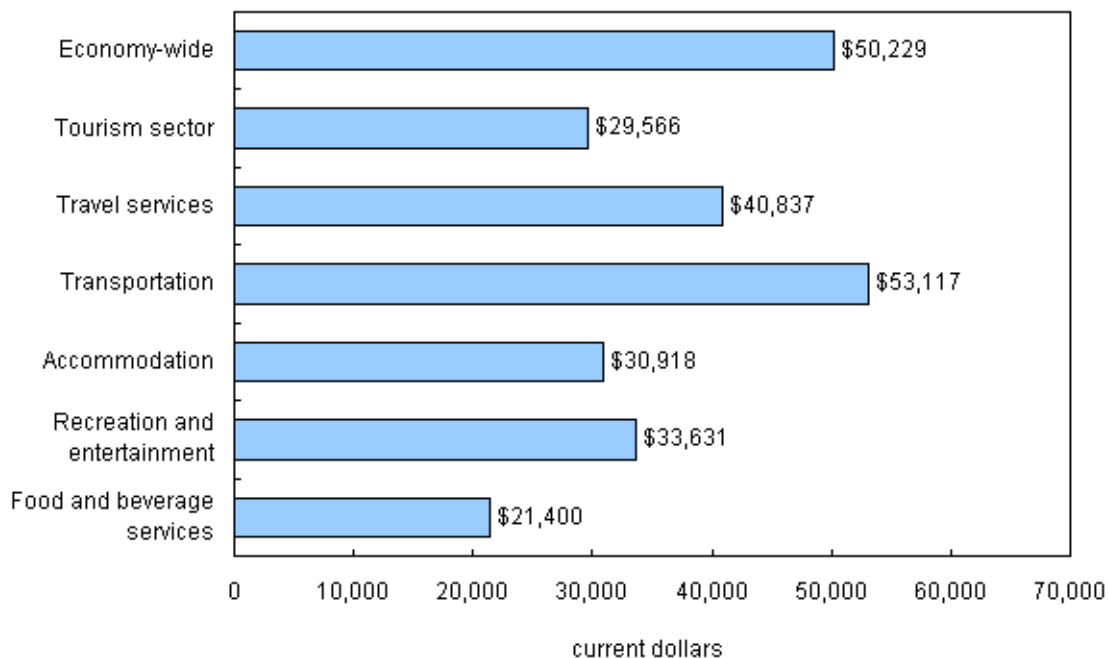
15. It should be noted that assumptions used to estimate labour compensation in tourism are not exactly the same as the ones used for total economy, as previously explained.

Jobs in food and beverage services continued to pay the least of all tourism industries, with an average hourly compensation of \$15.11 in 2009 (see Table 2). Even though this was up (+4.6%) from the previous year, it remained well below the average of \$19.59 for tourism industries in Canada.<sup>16</sup> However, over the years, hourly compensation in this industry group has improved. In 2009, hourly compensation in food and beverage services was only 22.9% below the tourism sector average, versus 29.9% below in 1997.

It should be noted that the average hourly wage for all jobs in food and beverage services was \$13.96 in 2009 (see Table 5). This is \$1.16 less than the average hourly compensation (\$15.11), which includes supplementary labour income (employer contributions on behalf of employees to employment insurance, private and public pension plans, worker's compensation, health and life insurance plans and retirement allowances).

Annual compensation combines information about hourly compensation and hours worked. In food and beverage services industries, jobs paid \$21,400 on average in 2009 (see Chart 2). This was 27.6% below the tourism sector average of \$29,566. Jobs in food and beverage services involved the fewest working hours per week and paid the least on an hourly basis in the tourism sector.

**Chart 2**  
**Annual compensation in tourism industries, Canada, 2009**



### Recreation and entertainment

In 2009, the recreation and entertainment industry group was the second largest employer among the groups included in the HRM, accounting for 274,000 jobs or 17.0% of employment in the sector. This industry posted a small decline in jobs in 2009. However, the industry has gained in terms of its share of sector employment over the years. In 1997, it accounted for 15.5% of all jobs in the sector.

16. Gratuities are included in these figures. See Appendix C to understand how gratuities are calculated.

The large proportion (42.3%) of part-time jobs in recreation and entertainment contributed to a short work week. Averaging 28.3 hours, it was among the shortest of all work weeks in tourism industries.

Recreation and entertainment held the largest proportion (18.6%) of self-employed workers with 51,000 jobs. However, they worked shorter hours (27.4 hours per week) than the self-employed in the tourism sector overall (34.7 hours per week).

Hourly compensation in this industry (\$22.85) was above the tourism sector average (\$19.59), but remained below hourly compensation economy-wide (\$29.56). Annual compensation reached \$33,631 in 2009, above the tourism sector average, even though the work week was among the shortest in the sector.

### **Accommodation**

Accounting for 222,000 jobs in 2009, or 13.8% of jobs in the tourism sector, accommodation was the third largest employer among tourism industries in Canada. Since 1997, the accommodation industry group has been slowly losing ground relative to other tourism industry groups in terms of its employment share. This industry group held almost the same number of jobs in 2009 as in 1997. In 1997, it held 16.1% of all jobs in the tourism sector, making it the second largest employer in the sector at that time.

Jobs in accommodation industries decreased by 0.2% in 2009. Almost 1,000 full-time jobs were lost, but some part-time jobs were created, which partially explains the shorter work week in 2009. Hours worked per week in accommodation fell to 31.3 hours in 2009, from 32.4 hours in 2008, but remained above the tourism sector average of 29.0 hours per week.

The proportion of part-time jobs (28.9%) in this industry group, while higher than economy-wide in Canada (22.7%), remained below the sector average of 40.2%. The proportion of self-employed in this industry group (4.1%) was among the lowest in the tourism sector, with 9,000 self-employed in 2009.

Hourly compensation in accommodation, which includes gratuities and supplementary labour income for employees, was up 0.9% in 2009 to reach \$19.00, but was still below the tourism sector average of \$19.59. Annual compensation in this industry group, at \$30,918, was higher than the sector average, mainly because of a longer work week (31.3 hours) compared to the sector (29.0 hours).

### **Transportation**

In 2009, the transportation industry group (which consists of air transportation and other transportation, including rail, water and bus transportation, as well as taxis and car rentals) accounted for 214,000 jobs, or 13.3% of all jobs in tourism in Canada. Jobs in transportation industries were down 1.7% (or -4,000) in 2009 compared to 2008. Both full-time jobs (-3,000) and part-time jobs (-1,000) were lost. The losses were centered mainly in other transportation industries (-3,000).

Jobs in transportation came with a long work week, on average 33.6 hours, almost 5 hours more than the average for tourism jobs in Canada. One reason for the longer hours is the higher proportion of full-time jobs (78.9%), particularly in other transportation industries. Another reason is the relatively high proportion (14.4%) of self-employed in transportation industries, who work longer hours (43.6 hours per week). For the tourism sector as a whole, the self-employed make up only 7.0% of jobs. Transportation supported 24,000 jobs from self-employment, of which, 23,000 were in the other transportation industries.

In addition to a long work week, jobs in transportation were paid more than in other tourism industries, with an hourly compensation of \$30.39, \$11.31 per hour more than the average across all tourism jobs in Canada (\$19.59). Hourly compensation was particularly high in air transportation, at \$41.31 per hour.

Transportation is the only industry group in the tourism sector with an annual compensation (\$53,117) above the economy-wide average of \$50,229. The long work week and the high hourly compensation in both air and other transportation explain this finding.

## Travel services

Travel services was the smallest tourism industry group, with 45,000 jobs in 2009, down 2.9% from the previous year. This industry group accounted for only 2.8% of all jobs in tourism in Canada.

Jobs in this industry group were mostly full-time (82%), the highest proportion among all tourism industries. As a result, this industry group had the longest work week, 34.5 hours. There were 4,000 self-employed workers, 7.8% of all jobs in travel services, slightly above the 7.0% share of self-employed for the tourism sector overall.

Hourly compensation in this industry group was above the tourism sector average (\$22.77 per hour versus \$19.59). Annual compensation was among the highest in the tourism sector, at \$40,837, owing to the long work week and high hourly compensation.

## 5.3 Occupations in tourism industries

Five occupation groups dominated the tourism sector, accounting for 48.2% of all employee jobs: food-counter attendants, kitchen helpers and related occupations with 245,000 jobs; food and beverage servers with 191,000 jobs; cooks with 145,000 jobs; restaurant and food service managers with 82,000 jobs; and cashiers with 59,000 jobs.

Furthermore, these occupations were concentrated mainly in one tourism industry group. Of the jobs in the five top occupations, 93% were in the food and beverage services industries.

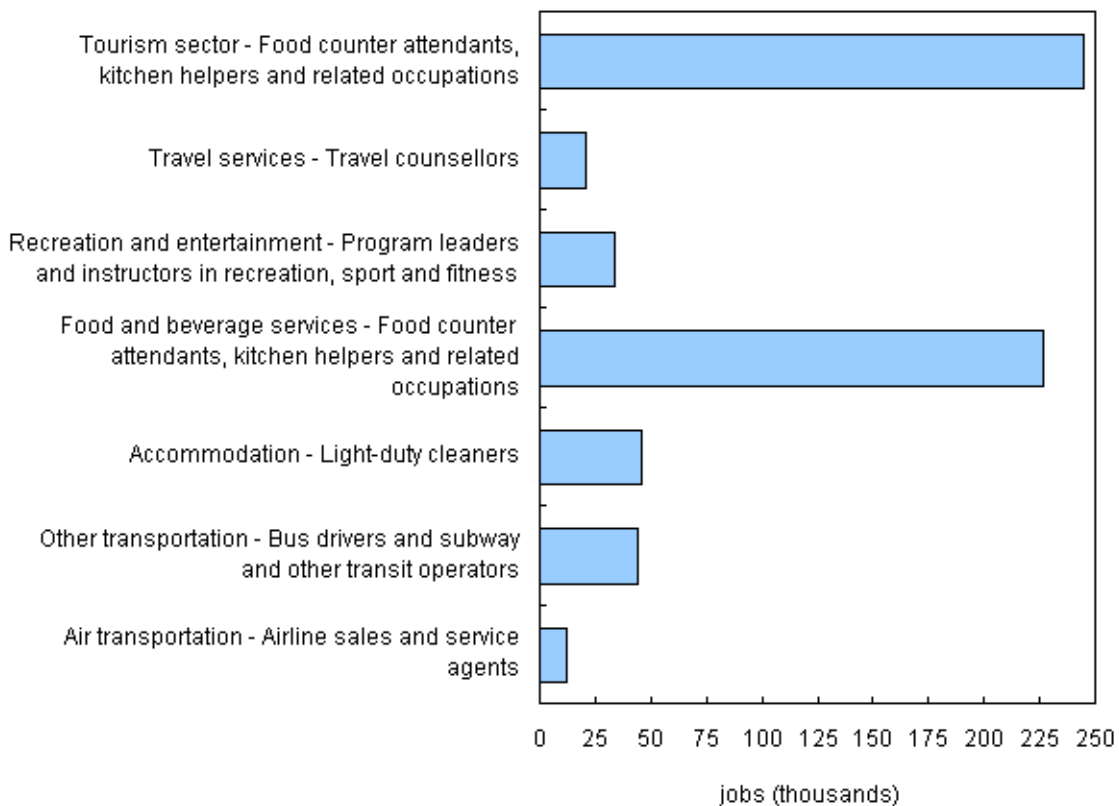
The most prevalent occupation in the accommodation industries group was light duty cleaner, with 45,000 employee jobs (see Chart 3). Bus drivers and subway and other transit operators was the main occupation group in other transportation industries, with 44,000 jobs, while program leaders and instructors in recreation, sport and fitness were the most common occupation in recreation and entertainment, with 34,000 jobs. Travel counsellors accounted for only 21,000 jobs, but represented the primary occupation in travel services (see Chart 3). Airline sales and service agents was the main occupation in air transportation.

When comparing wages, bus drivers and subway and other transit operators (\$23.27), airline sales and service agents (\$24.08), and travel counsellors (\$18.27), earned more than the tourism average of \$17.76.<sup>17</sup> Bus drivers and subway and other transit operators earned the most, on an annual basis, at \$36,734. The most prevalent occupation in the tourism sector, food-counter attendants, kitchen helpers and related occupations, earned the least, with an annual salary of \$11,403. Program leaders and instructors in recreation, sport and fitness earned an annual salary of \$13,709.

---

17. In 2009, the average wage for the tourism sector was \$17.76 per hour while the average compensation for the tourism sector was \$19.59 per hour.

**Chart 3**  
**Main occupation in each tourism industry group, Canada, 2009**



#### 5.4 Profile of employees in tourism industries

The HRM provides details concerning three characteristics of employees: gender, age group, and immigrant status. The following highlights some of the HRM results according to these demographics (see Table 5).

##### Gender

Women in Canada continued to be over-represented in the tourism sector, accounting for 55.4% of employee jobs in 2009. Women held 830,000 employee jobs, 163,000 more than men. A higher proportion of women working in tourism industries were less than 25 years of age (42.0%) compared to men (36.8%).

Women were under-represented in only one industry group, transportation. Only 31.4% of the employee jobs in this industry were held by women. On the other hand, women held the majority of jobs in travel services (73.8%).

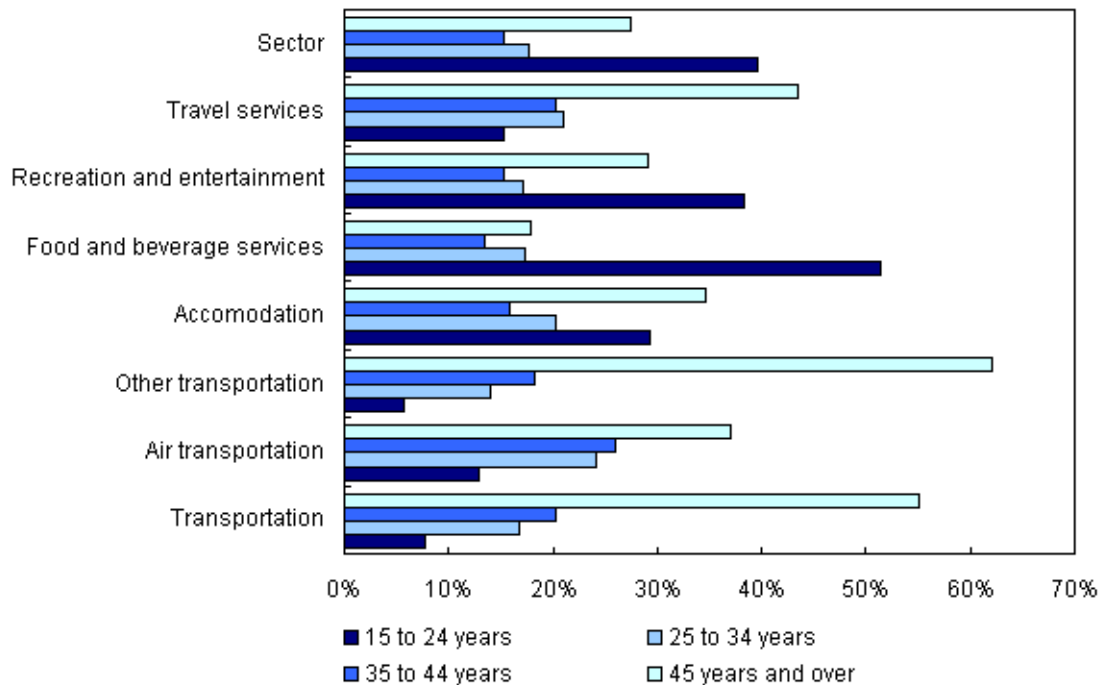
In all tourism industries, women had shorter work weeks than their male counterparts. This was especially the case for air transportation (24.9 hours per week for women compared to 36.1 hours for men) and other transportation industries. Women (44.8%) were also more likely than men (34.8%) to work in part-time jobs.

Women working in tourism industries in Canada earned on average \$4.51 less than men (\$15.55 per hour versus \$20.06). There was a noteworthy variation in women's wages, with jobs in air transportation paying the most, \$29.37, and jobs in food and beverage services paying the least (\$13.01). Even though women in air transportation jobs were well paid, they were still paid \$8.93 less than men on average.

The majority of women employed in the tourism sector, worked in food and beverage services industries (60.4%), where wages paid to women were the lowest, \$13.01 per hour, and the number of hours worked were among the lowest, 25.0 hours per week. Only 49.0% of men employed in the sector were in this industry. The most common occupation for women was food and beverage servers, while the most common for men was bus drivers and subway and other transit operators, where hourly wages were higher and hours worked per week longer.

On average, women earned an annual salary of \$21,295 in the tourism sector compared to \$32,777 for men.

**Chart 4**  
**Job share by age group in tourism industries in Canada, 2009**



### Youth and older workers

Youth aged 15 to 24 years were a major source of labour for the tourism industries in Canada in 2009. They held 594,000 employee jobs, accounting for four out of ten employee jobs in tourism. Three out of four young workers were employed in the food and beverage services industries. The most common occupation among youth was food counter attendants, kitchen helpers and related occupations.

Older workers, aged 45 years or older, were also an important source of labour for tourism, contributing 411,000 employee jobs (27.4%). In 2009, older workers were employed more evenly across all tourism industries compared to young adults. Two tourism industry groups employed a notably older workforce: older workers accounted for 62.1% of all employees in other transportation industries and 43.6% of all employees in travel services (see Chart 4). The most prevalent occupation among older workers was cook.

Almost seven out of ten young workers were working in part-time jobs in tourism compared to about one out of five older workers. Young adults worked fewer hours per week (18.1 hours) compared to older workers (35.7 hours). This was especially the case in the recreation and entertainment industries (15.1 hours for young adults versus 35.1 hours for older workers). According to the Labour Force Survey,<sup>18</sup> in 2009 about 90% of young workers gave attending school as the main reason to be working part-time.



Wages of young workers were also considerably lower. The hourly wage among workers in tourism industries aged 15 to 24 was \$11.68 in 2009, almost half that of employees aged 45 and over (\$21.76). The wage differential between young and old workers was the most pronounced in the air transportation industry group, \$18.36 versus \$42.77, respectively. Annually, young workers earned \$10,982, almost \$30,000 less on average than older workers.

### **Immigrants**

Immigrants are an important source of labour for the tourism sector in Canada. In 2009, immigrants held 333,000 jobs, accounting for 22.2% of employee jobs in tourism. Almost 60% of all immigrants employed in the sector worked in the food and beverage services industry compared to 54.5% of non-immigrants. On the other hand, only 9.0% of all immigrants employed in the sector worked in recreation and entertainment compared to 16.5% of non-immigrants. The concentrations were similar between immigrants and non-immigrants in other tourism industry groups.

Immigrants in tourism industries were older than other tourism workers. About four out of ten immigrants were 45 years or older, while slightly more than two out of ten non-immigrants were older workers.

Compared to non-immigrants (56.9%), immigrants (69.1%) were more likely to work full-time. In 2009, immigrants worked longer hours than their non-immigrant counterparts, 33.2 hours per week versus 27.3 hours.

Immigrants earned lower wages per hour (\$16.97 per hour) than non-immigrants (\$18.03 per hour). In transportation industries, wages were notably lower for immigrants (\$23.73 for immigrants versus \$29.77 for non-immigrants). However, when looking at the annual salary, immigrants were paid more than non-immigrants in all tourism industries (with the exception of transportation) with an average salary of \$29,337 versus \$25,572 for non-immigrants. Even though immigrants earned lower wages per hour on average, they compensated by working longer hours.

## **6. Conclusion and future work**

In 2009, jobs in tourism industries declined 0.6%, a smaller decline than for all industries in Canada (-1.7%) and a smaller decline than for jobs generated by tourism demand (-2.2%). Jobs in tourism industries were not affected as much because of sustained local consumption of tourism commodities.

With this update, it has been possible to improve the timeliness of the data. The data can now be published six months after the reference period. Estimates were provided up to and including 2009, an addition of two years of data. The methodology for imputing the labour portion of mixed income was also improved through the exclusion of SLI.

The feasibility of extending the HRM to a regional dimension has been explored and has been successful for Ontario. Another pilot is planned to look at the feasibility of using the methodology of the HRM for a province with a smaller population.

Currently the HRM provides information on the total number of jobs due to the production of commodities in tourism industries whether the commodities are consumed by visitors or by local residents. Work is currently underway to develop detailed estimates that identify separately, at the national level, jobs due to production serving visitors from jobs due to production serving local residents.

---

18. For more information on part-time work, see Marshall 2000.

## Data tables

**Table 1 Gross domestic product, tourism gross domestic product, tourism expenditures and jobs in tourism industries and total economy, Canada, 2003 to 2009**

	2003	2004	2005	2006	2007	2008	2009
<b>Total economy</b> <sup>1</sup>							
Gross domestic product at basic prices (millions of 2002 \$)	1,091,378	1,124,999	1,158,680	1,191,250	1,222,697	1,230,365	1,194,284
Gross domestic product at basic prices (percent change)	2.1	3.1	3.0	2.8	2.6	0.6	-2.9
Jobs (thousands)	15,917	16,189	16,454	16,755	17,109	17,369	17,074
Jobs (percent change)	2.1	1.7	1.6	1.8	2.1	1.5	-1.7
<b>Tourism supply</b> <sup>2</sup>							
Supply of tourism commodities (millions of 2002 \$)	88,699	92,247	94,888	98,680	101,771	103,936	101,899
Supply of tourism commodities (percent change)	-1.0	4.0	2.9	4.0	3.1	2.1	-2.0
Jobs in tourism industries (thousands)	1,587	1,592	1,565	1,575	1,597	1,619	1,609
Jobs in tourism industries (percent change)	2.1	0.4	-1.7	0.6	1.4	1.4	-0.6
<b>Tourism demand</b> <sup>3</sup>							
Tourism gross domestic product at basic prices (millions of 2002 \$)	17,457	18,123	18,787	19,508	20,142	20,517	19,900
Tourism gross domestic product at basic prices (percent change)	-2.6	3.8	3.7	3.8	3.2	1.9	-3.0
Tourism demand (millions of 2002 \$)	40,154	42,360	44,106	46,085	47,940	48,880	47,589
Tourism demand (percent change)	-1.6	5.5	4.1	4.5	4.0	2.0	-2.6
Tourism domestic demand (millions of 2002 \$)	27,906	28,961	31,238	33,903	36,223	37,765	37,529
Tourism domestic demand (percent change)	3.7	3.8	7.9	8.5	6.8	4.3	-0.6
Tourism demand by non-residents (millions of 2002 \$)	12,247	13,399	12,868	12,183	11,717	11,114	10,061
Tourism demand by non-residents (percent change)	-11.8	9.4	-4.0	-5.3	-3.8	-5.1	-9.5
Jobs generated by tourism demand (thousands)	491	496	501	511	525	533	521
Jobs generated by tourism demand (percent change)	0.2	0.8	1.1	2.1	2.7	1.4	-2.2

1. Source: CANSIM tables 379-0027 and 383-0009.

2. Includes supply to local residents. Excludes non-tourism industries.

3. Excludes demand by local residents. Excludes non-tourism industries.

**Table 2 Annual compensation and hourly compensation in tourism industries and total economy, Canada, 2003 to 2009**

	2003	2004	2005	2006	2007	2008	2009	percent change 2008 to 2009
<b>Annual compensation in Canada for all jobs</b>	millions of current dollars							%
Total tourism industries	38,247	39,857	39,904	42,493	45,036	47,445	47,575	0.3
Total tourism industries (percent change)	0.9	4.2	0.1	6.5	6.0	5.3	0.3	
Total economy <sup>1</sup>	650,317	687,580	726,342	774,924	818,337	856,857	857,588	0.1
Total economy <sup>1</sup> (percent change)	4.6	5.7	5.6	6.7	5.6	4.7	0.1	
Ratio total tourism industries to total economy	0.059	0.058	0.055	0.055	0.055	0.055	0.056	
<b>Hourly compensation in Canada per job<sup>2,3</sup></b>	current dollars							%
Transportation	27.23	27.77	27.78	28.27	28.88	28.86	30.39	5.3
Air transportation	32.68	31.84	32.75	33.81	35.76	37.96	41.31	8.8
Other transportation	25.00	26.04	26.24	26.61	26.79	26.20	27.14	3.6
Accommodation	14.00	14.62	15.47	17.40	18.00	18.84	19.00	0.9
Food and beverage services	10.91	11.41	12.14	12.50	13.41	14.45	15.11	4.6
Recreation and entertainment	18.51	18.60	19.60	21.06	21.41	22.29	22.85	2.5
Travel services	19.10	19.64	20.37	21.29	22.27	23.82	22.77	-4.4
Employee	15.50	15.91	16.58	17.43	18.30	19.14	19.79	3.4
of which: wages	13.81	14.06	14.70	15.45	16.35	17.17	17.76	3.4
Self-employed <sup>3</sup>	14.27	15.07	14.83	15.98	16.74	17.12	17.34	1.3
Ratio self-employed to employee	0.921	0.947	0.895	0.917	0.915	0.894	0.876	
Full-time	16.54	17.10	17.77	18.48	19.28	20.32	20.76	2.2
Part-time	10.91	10.88	11.44	12.88	13.85	13.90	15.29	10.0
Ratio part-time to full-time	0.660	0.637	0.644	0.697	0.718	0.684	0.736	
Total tourism industries <sup>3</sup>	15.39	15.83	16.43	17.31	18.16	18.96	19.59	3.3
Total tourism industries <sup>3</sup> (percent change)	-1.8	2.9	3.8	5.4	4.9	4.4	3.3	
Total economy <sup>1</sup>	23.56	24.24	25.39	26.61	27.56	28.56	29.56	3.5
Total economy <sup>1</sup> (percent change)	3.0	2.9	4.8	4.8	3.5	3.6	3.5	
Ratio total tourism industries to total economy	0.653	0.653	0.647	0.651	0.659	0.664	0.663	
Employee	25.01	25.69	26.90	28.18	29.23	30.23	31.36	3.7
of which: wages	21.82	22.38	23.44	24.49	25.60	26.51	27.48	3.7
Self-employed	10.57	10.87	11.33	11.51	11.77	12.17	12.39	1.8
Ratio self-employed to employee	0.423	0.423	0.421	0.408	0.402	0.403	0.395	
Full-time	24.50	25.15	26.38	27.63	28.58	29.66	30.73	3.6
Part-time	15.91	16.49	17.11	17.90	18.75	19.23	20.12	4.7
Ratio part-time to full-time	0.650	0.656	0.648	0.648	0.656	0.648	0.655	

1. Source: CANSIM table 383-0009.

2. Hourly compensation includes wages and salaries, supplementary labour income and the labour portion of mixed income after expenses accruing to the self-employed.

3. Excludes supplementary labour income from the labour portion of mixed income for the self-employed.

**Table 3 Jobs in tourism industries and total economy, Canada, 2003 to 2009**

Number of jobs in Canada	2003	2004	2005	2006	2007	2008	2009	percent change 2008 to 2009
	thousands							%
Transportation	207	197	191	203	219	218	214	-1.7
Air transportation	62	59	47	50	55	54	53	-1.7
Other transportation	146	138	144	153	165	164	161	-1.6
Accommodation	225	226	225	221	220	223	222	-0.2
Food and beverage services	834	834	832	839	838	858	853	-0.5
Recreation and entertainment	276	292	272	269	274	275	274	-0.3
Travel services	45	44	44	44	44	47	45	-2.9
Employee	1,469	1,478	1,457	1,468	1,481	1,503	1,497	-0.4
Self-employed	118	115	108	107	115	116	112	-3.5
Ratio self-employed to total tourism industries	0.074	0.072	0.069	0.068	0.072	0.072	0.070	
Full-time	974	979	952	960	977	974	962	-1.3
Part-time	613	613	613	615	619	646	648	0.3
Ratio part-time to total tourism industries	0.386	0.385	0.392	0.390	0.388	0.399	0.402	
Total tourism industries	1,587	1,592	1,565	1,575	1,597	1,619	1,609	-0.6
Total tourism industries (percent change)	2.1	0.4	-1.7	0.6	1.4	1.4	-0.6	
Total economy <sup>1</sup>	15,917	16,189	16,454	16,755	17,109	17,369	17,074	-1.7
Total economy <sup>1</sup> (percent change)	2.1	1.7	1.6	1.8	2.1	1.5	-1.7	
Ratio total tourism industries to total economy	0.100	0.098	0.095	0.094	0.093	0.093	0.094	
Employee	14,373	14,665	14,900	15,211	15,502	15,778	15,461	-2.0
Self-employed	1,544	1,524	1,555	1,544	1,607	1,591	1,613	1.4
Ratio self-employed to total economy	0.097	0.094	0.094	0.092	0.094	0.092	0.094	
Full-time	12,340	12,617	12,820	13,122	13,393	13,553	13,197	-2.6
Part-time	3,577	3,573	3,635	3,633	3,715	3,816	3,877	1.6
Ratio part-time to total economy	0.225	0.221	0.221	0.217	0.217	0.220	0.227	

1. Source: CANSIM table 383-0009.

**Table 4 Weekly hours worked in tourism industries and total economy, Canada, 2003 to 2009**

Weekly hours worked in Canada per job	2003	2004	2005	2006	2007	2008	2009	percent change 2008 to 2009
	hours							%
Transportation	34.6	35.7	34.9	35.2	34.3	34.6	33.6	-2.7
Air transportation	33.7	35.2	33.3	33.3	32.2	31.7	31.3	-1.2
Other transportation	35.0	35.9	35.5	35.8	35.1	35.5	34.4	-3.2
Accommodation	33.2	33.6	33.2	32.4	32.9	32.4	31.3	-3.4
Food and beverage services	28.3	28.4	27.9	28.2	28.0	27.8	27.2	-2.1
Recreation and entertainment	29.3	29.5	28.8	28.8	28.9	29.0	28.3	-2.5
Travel services	33.4	35.1	34.4	34.7	34.3	33.2	34.5	3.9
Employee	29.6	29.8	29.4	29.5	29.4	29.2	28.6	-2.0
Self-employed	37.3	37.7	36.0	36.4	36.2	36.4	34.7	-4.7
Ratio self-employed to employee	1.261	1.264	1.225	1.235	1.231	1.247	1.213	
Full-time	39.0	39.4	38.7	38.9	38.7	38.9	38.1	-2.0
Part-time	16.0	16.1	16.1	16.1	15.9	15.8	15.5	-1.9
Ratio part-time to full-time	0.410	0.409	0.416	0.413	0.410	0.406	0.406	
Total tourism industries	30.1	30.4	29.8	30.0	29.9	29.7	29.0	-2.3
Total tourism industries (percent change)	0.7	0.9	-1.9	0.4	-0.4	-0.5	-2.3	
Total economy <sup>1</sup>	33.3	33.7	33.4	33.4	33.4	33.2	32.7	-1.6
Total economy <sup>1</sup> (percent change)	-0.6	1.1	-0.8	0.0	-0.1	-0.5	-1.6	
Ratio total tourism industries to total economy	0.903	0.902	0.893	0.897	0.895	0.894	0.888	
Employee	33.2	33.5	33.4	33.4	33.3	33.2	32.7	-1.6
Self-employed	34.5	35.2	34.1	34.1	34.1	33.5	32.8	-2.3
Ratio self-employed to employee	1.040	1.050	1.023	1.023	1.024	1.010	1.003	
Full-time	38.3	38.7	38.3	38.2	38.2	38.1	37.6	-1.2
Part-time	16.2	16.2	16.1	16.1	16.0	16.0	15.9	-0.7
Ratio part-time to full-time	0.423	0.419	0.421	0.421	0.419	0.419	0.422	

1. Source: CANSIM table 383-0009.

**Table 5 Employee jobs, hours and wages by employee characteristics in tourism industries, Canada, 2009**

	Total	Gender		Age group				Immigrant status	
		Female	Male	15 to 24	25 to 34	35 to 44	45 +	Immigrant	Non-immigrant
<b>Number of employee jobs</b>	thousands								
Transportation	191	60	131	15	31	39	106	44	146
Air transportation	52	23	29	7	12	14	20	13	40
Other transportation	138	37	101	8	19	25	86	31	107
Accommodation	213	128	85	62	43	34	74	51	162
Food and beverage services	829	501	327	426	144	112	147	195	634
Recreation and entertainment	223	110	113	86	38	34	65	30	192
Travel services	42	31	11	6	9	8	18	12	29
Full-time	892	458	435	190	200	182	320	230	662
Part-time	605	372	232	404	65	45	91	103	502
<b>Total tourism industries</b>	<b>1,497</b>	<b>830</b>	<b>667</b>	<b>594</b>	<b>265</b>	<b>227</b>	<b>411</b>	<b>333</b>	<b>1,164</b>
<b>Weekly hours worked per job</b>	hours								
Transportation	32.4	26.7	35.0	24.2	31.3	35.6	32.6	33.1	32.1
Air transportation	31.2	24.9	36.1	23.6	30.2	34.2	32.2	28.7	32.0
Other transportation	32.8	27.8	34.6	24.7	32.0	36.4	32.7	34.9	32.2
Accommodation	31.4	29.2	34.6	18.4	34.1	39.5	37.0	37.7	29.4
Food and beverage services	26.8	25.0	29.5	18.3	33.2	36.6	37.3	32.1	25.1
Recreation and entertainment	28.5	26.8	30.2	15.1	36.3	40.8	35.1	31.7	28.0
Travel services	34.3	34.0	35.3	22.4	34.8	38.0	36.6	37.0	33.2
Full-time	37.5	34.9	40.3	27.3	38.3	41.9	40.6	40.9	36.3
Part-time	15.4	15.8	14.8	13.7	19.1	19.9	18.3	16.0	15.3
<b>Total tourism industries</b>	<b>28.6</b>	<b>26.3</b>	<b>31.4</b>	<b>18.1</b>	<b>33.6</b>	<b>37.5</b>	<b>35.7</b>	<b>33.2</b>	<b>27.3</b>
<b>Hourly wages per job</b>	current dollars								
Transportation	28.33	25.79	29.22	17.31	23.32	28.93	30.63	23.73	29.77
Air transportation	35.18	29.37	38.30	18.36	25.95	37.15	42.77	31.29	36.30
Other transportation	25.87	23.80	26.48	16.48	21.81	24.74	27.79	21.22	27.36
Accommodation	17.13	15.43	19.27	12.45	16.85	18.06	18.79	19.59	16.15
Food and beverage services	13.92	13.01	15.11	11.03	14.26	15.67	16.42	13.82	13.96
Recreation and entertainment	20.66	19.18	21.94	13.29	19.45	23.00	24.16	20.42	20.70
Travel services	21.68	20.49	24.98	12.69	19.21	23.63	23.80	20.29	22.35
Full-time	18.88	16.31	21.22	12.12	16.90	20.01	22.10	17.23	19.53
Part-time	13.72	13.47	14.15	11.27	15.12	16.88	19.14	15.48	13.34
<b>Total tourism industries</b>	<b>17.76</b>	<b>15.55</b>	<b>20.06</b>	<b>11.68</b>	<b>16.65</b>	<b>19.68</b>	<b>21.76</b>	<b>16.97</b>	<b>18.03</b>
<b>Annual wages per job</b>	current dollars								
Transportation	47,674	35,753	53,146	21,771	37,997	53,555	51,922	40,858	49,735
Air transportation	57,033	38,024	71,889	22,557	40,801	66,080	71,514	46,738	60,342
Other transportation	44,131	34,343	47,706	21,120	36,292	46,786	47,260	38,482	45,798
Accommodation	27,944	23,450	34,657	11,936	29,849	37,140	36,138	38,402	24,687
Food and beverage services	19,372	16,908	23,146	10,519	24,613	29,797	31,893	23,084	18,229
Recreation and entertainment	30,630	26,695	34,482	10,462	36,682	48,821	44,084	33,635	30,154
Travel services	38,725	36,232	45,901	14,793	34,732	46,639	45,354	39,070	38,579
Full-time	36,842	29,598	44,470	17,233	33,680	43,620	46,643	36,689	36,896
Part-time	11,014	11,092	10,887	8,035	14,993	17,436	18,234	12,912	10,624
<b>Total tourism industries</b>	<b>26,410</b>	<b>21,295</b>	<b>32,777</b>	<b>10,982</b>	<b>29,109</b>	<b>38,415</b>	<b>40,363</b>	<b>29,337</b>	<b>25,572</b>

## Appendix A: Accounting framework

The Human Resource Module (HRM) is based on and rooted in the accounting framework of the Canadian Tourism Satellite Account (CTSA), which follows the international guidelines in Recommended Methodological Framework: Tourism Satellite Account (TSA: RMF).<sup>19</sup> In turn, the TSA: RMF is based on the accounting framework and principles of the internationally recognized System of National Accounts 1993 (SNA).<sup>20</sup>

Because the HRM uses the same framework, concepts and definitions as the CTSA, results from both can be readily compared. By extension, the HRM results can be compared to those of the Canadian System of National Accounts (CSNA), in particular, to the number of jobs, hours worked and labour income in other industries in the economy. This enhances the analytical capacity of the HRM.<sup>21</sup>

---

19. See Commission of the European Communities, Organisation for Economic Co-operation and Development, et al. 2001.

20. See Commission of the European Communities, International Monetary Fund, et al. 1993.

21. Some conceptual differences exist between the CTSA and the international guidelines in the TSA-RMF. See Kemp and Nijhowne 2004.



## Appendix B: Concepts and definitions

The Human Resource Module (HRM) carries information on the number of employee and self-employment jobs, full-time equivalent employment, total hours worked and labour income, gross wages and salaries and supplementary labour income. Some of these basic concepts and definitions are described next. They are discussed from a total industry perspective first, that is to say, regardless of the source of demand, tourism or non-tourism.

In the HRM, total employment in an industry is the number of all employee and self-employment jobs in that industry. It should be noted that a job that exists for only part of the year (e.g., 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. For this reason, jobs are not a good measure of labour inputs to production.

A better measure is full-time equivalent employment in which part-time jobs are converted to full-time jobs on the basis of hours worked. For example, two part-time jobs of twenty hours per week would be equivalent to one full-time job at forty hours per week. Total hours worked is an even better measure of aggregate volume of labour inputs to production, and the one used in the Canadian System of National Accounts (CSNA) to calculate labour productivity. The concept here is that of actual hours worked, not usual hours, and of hours worked, not hours paid (see Appendix C.1).

The value of labour inputs to production in an industry is measured by the labour income and a labour component of mixed income for all jobs in that industry. Labour income consists of gross (i.e., before tax) wages and salaries, including tips,<sup>22</sup> commissions, bonuses, as well as supplementary labour income which covers mandatory and non-mandatory employer contributions to pension plans and social insurance and health plans.<sup>23</sup> Mixed income is the income after expenses of unincorporated business accruing to the self-employed.<sup>24</sup>

Work is currently underway to develop estimates on the number of jobs that can be directly attributed to, or generated by, tourism demand. These estimates will provide the link between the HRM and the Canadian Tourism Satellite Account (CTSA) and National Tourism Indicators (NTI). Tourism employment in an industry (concept used in the CTSA and NTI) is the number of jobs generated by, or attributable to, visitor spending on the goods and/or services produced by that industry. The difference between tourism employment and total employment (concept used in HRM) is the number of jobs attributable to non-tourism (i.e., not directly attributable to tourism demand).

As an example, if the full-service restaurants industry has a total of 100,000 jobs, only the share that is directly associated with tourism (say 25%, or 25,000 jobs) represents the tourism employment in this industry. Similarly, only 25% of the full-time equivalent employment, total hours worked and labour income is attributed to tourism. Derived variables, such as annual average hours worked and annual average wage and salary per tourism job, as well as the average hourly earnings per hour worked per tourism job are assumed to be the same for all jobs in an industry.

At the core of the CTSA and the NTI is the definition of tourism. Tourism is defined according to international standards 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”. Persons who engage in tourism, so-defined, are called visitors. Visitors consist of tourists (those who visit and stay outside their usual environment for at least one night) and same-day visitors.

22. The imputation of unreported tips in the CSNA is described in Appendix C, C.1.

23. Includes Medicare, dental plans, short-term and long-term disability plans, life insurance, etc.

24. Mixed income is found in the CTSA. For the HRM, an imputation is made for the labour component of mixed income. See the discussion of Appendix D: Methodology, Step 1.

The definition of tourism is quite broad in that both personal and business travels are included. The international standard does not precisely spell out the notion of usual environment, thereby allowing a country to apply its own specifications. For operational purposes, Canada has defined the concept of usual environment as the area less than 80 kilometres one-way from home.<sup>25</sup> It should be noted that not all travel is tourism. In particular, the definition rules out several types of travel, including commuting to and from work or school, travel by armed forces and diplomats, as well as migration. On the other hand, crossing an international boundary is considered tourism regardless of the distance travelled.

Tourism demand is the spending by Canadian and non-resident visitors on domestically produced commodities. This spending has a direct impact on a wide range of industries, some more so than others. This leads to a definition of a tourism industry as one that would cease to exist without tourism, or would continue to exist only at a significantly reduced level of activity. By this definition, travel services is a tourism industry, while retail trade, which derives some of its business from visitors, is not. A tourism commodity is a good or service for which a significant part of its total demand comes from visitors. Air passenger transportation is a tourism commodity, while groceries, although occasionally bought by visitors, is not, because most groceries are bought by local residents.

Gross domestic product (GDP) can be defined as the unduplicated value of production of goods and services within the geographic boundaries of a country or region (e.g., province, territory).<sup>26</sup> Tourism GDP is the GDP that can be attributed to the production of goods and services consumed directly by visitors.<sup>27</sup> In the CTSA, tourism GDP is calculated as the sum of the labour income, mixed income (net income of unincorporated business) and other operating surplus (corporate profit and depreciation) that can be directly attributed to visitor spending.<sup>28</sup>

Several socio-demographic variables are available in the HRM. One of these, immigrant status, is defined as follows: an immigrant is a permanent resident who is not a Canadian citizen at birth or is a person who holds a study or work permit or who is a refugee claimant or is a family member living with a refugee claimant. A non-immigrant is a person who is a Canadian citizen at birth.

---

25. The operational definition of tourism has been revised with the new, redesigned Travel Survey of Residents of Canada. Tourism will now include all overnight "out of town" trips and same-day trips exceeding forty kilometres one way from home. In addition to the usual exclusions, routine trips, such as for grocery shopping, will be excluded even if "out of town" or over forty kilometres.

26. Unduplicated means that values are not double counted. If, for example, the value of fuel used by aircraft is counted along with airfares (which already include the costs of fuel inputs) the value of the fuel would be counted twice. Instead, only the value added (the difference between revenues from sales of goods and services produced and the cost of intermediate inputs of goods and services) at each stage of production is counted in GDP. It should be noted that GDP in the CSNA and CTSA is measured at basic prices. This means essentially that valuation is at the prices received by sellers, and does not include taxes on the sale of goods and services.

27. The qualifier "directly" is important. To continue the example from above, "directly" means that only the GDP generated in the production of passenger air transportation (which visitors consume in their travels) can be counted in tourism GDP, not any of the GDP or value added generated in the production of goods and services that are inputs to air transport (like the fuel which airlines use). It is in this sense that tourism GDP is directly attributable to visitor spending. There is, of course, GDP generated in the upstream production chain that can be attributed to tourism, but only indirectly. Estimates of indirect effects of tourism can be obtained from economic impact models.

28. In the CTSA, GDP is calculated using the sum of incomes generated by production approach, one of the three approaches to measuring GDP. The other two approaches are based on summing (1) the final expenditures on goods and services produced, and (2) the value added generated in the production of goods and services.

## Appendix C: Data sources

There are four main sources of data underlying the Human Resource Module (HRM). They are the Canadian Productivity Accounts (CPA) data in the Canadian System of National Accounts (CSNA), the Census, the Labour Force Survey (LFS), and the Survey of Employment Payroll and Hours (SEPH). These are described below along with their main uses.

### C.1 Canadian System of National Accounts

The CPA database in the CSNA provides the tourism industry group totals for employee jobs and hours worked, labour income, wages and salaries and supplementary labour income, for both full-time and part-time jobs. Comparable data are also available for self-employment jobs, but the income variable is the net income of unincorporated businesses. These totals are for all jobs, including those attributable to both tourism and non-tourism demand. The data are classified on a North American Industry Classification System (NAICS) basis by province.

The CPA data for jobs are based, in turn, on the LFS estimates for the number of persons employed. This is adjusted to jobs by adding the second jobs of multiple-job holders.<sup>29</sup> 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 Canadian embassies abroad) to reflect the total economy. Last, deductions are made to exclude those absent from work without pay during the reference week.<sup>30</sup> SEPH is primarily used to develop the industry allocation of the adjusted LFS benchmarks, although industry surveys and administrative sources (for example T4 slips)<sup>31</sup> are also used for selected industries.

The hours worked data include the following:

- hours actually worked during normal periods of work
- time worked in addition to hours worked during normal periods of work, and generally paid at higher rates than the normal rate (overtime)
- time spent at the place of work on work such as the preparation of the workplace, repairs and maintenance, preparation and cleaning of tools, and the preparation of receipts, time sheets and reports
- time spent at the place of work waiting or standing-by for such reasons as lack of supply of work, breakdown of machinery, or accidents, or time spent at the place of work during which no work is done but for which payment is made under a guaranteed employment contract
- time corresponding to short periods of rest at the workplace, including tea and coffee breaks.

They exclude:

- hours paid for but not actually worked, such as paid annual leave, paid public holidays, paid sick leave
- meal breaks
- time spent on travel to and from home and work.

The hours worked data are adjusted to correct for reference week effects in order to estimate annual hours worked.

29. Industry of second job is determined based on patterns observed for multiple job holders in the Survey of Labour and Income Dynamics.

30. For more details on the current CSNA methodology see Maynard 2005.

31. Forms used by the Canada Revenue Agency for the employer to report the summary of remuneration paid to all employees who received salary, wages, tips or gratuities, bonuses, vacation pay, employment commissions and other remuneration.

In the CSNA, industry totals for wages and salaries come from a detailed reconciliation of wages and salaries from survey data and T4 administrative data. Estimates for components of supplementary labour income come in part from the T4 system (e.g., employer contributions to Employment Insurance (EI) and Québec Pension Plan (QPP) and Canada Pension Plan (CPP)), administrative data on registered pension plans and from Workers Compensation Boards, as well as other survey sources (for contributions like life, accident and health insurance).

It should be noted that adjustments for unreported tips are made to the benchmarks for several industries:

- Performing arts and spectator sports and related industries (NAICS 711)
- Amusement, gambling and recreation industries (NAICS 713)
- Accommodation services (NAICS 721)
- Food services and drinking places (NAICS 722).

The adjustments for tips are made on the basis of industry sales of alcoholic beverages, full service restaurant meals (no tips are assumed on fast food), and accommodation. There are additional, smaller imputations for the tips in personal care services (barbershops and beauty salons, etc.) and railway transportation (for luggage porters) industries.

Average hourly earnings are calculated in the HRM as wages and salaries divided by total hours worked. Because tips and pay for absences (sick leave, vacations, etc.) are included in wages and salaries, the hourly earnings include an implicit premium on top of the straight wage for both.

## **C.2 Census of Population**

The Census of Population provides comprehensive data on the demographic, social and economic characteristics of Canadians. Detailed information is collected from one in every five households. Given its large sample size, the Census serves as the most reliable source of information on occupational distributions. As such, data from the 2001 and 2006 Census are used primarily to distribute the CSNA totals for employee jobs, hours worked and wages and salaries across occupations by gender and age group, and between immigrants and non-immigrants.

The data used in these calculations are based on occupational distributions for persons who had employment income in the census reference years (in this case, 2000 and 2005). The self-employed are excluded in the calculations.

The samples are broken down into part-and full-time categories according to whether the weeks worked in the reference year were primarily full-time (30 or more hours per week) or part-time (less than 30 hours per week). Also, industry group and occupation relate to the main job held during the reference week (defined as the job at which the most hours were worked) or, if unemployed, to the main job held since the start of the reference year (defined as the one in which the most weeks were worked).

Tabulations for this study use the National Occupational Classification for Statistics (NOC-S) 2006 and NAICS 2002 for the 2006 Census and NOC-S 2001 and NAICS 1997 for the 2001 Census. Differences between classification systems do not affect tourism industries and occupations.

## **C.3 Labour Force Survey**

The Labour Force Survey (LFS) is conducted monthly and includes approximately 53,400 households, which translates roughly to a sample size of 100,000 people over the age of fifteen. The LFS collects basic labour force activity information including industry and occupation of employment for the survey reference week (normally the

week including the 15th of the month), both for employees and the self-employed. It does not cover the territories, military personnel or civil servants stationed abroad, or persons residing on Indian reserves. Industry data are based on NAICS 2002, while occupation data use NOC-S 2001 for the entire period from 1997 to 2009.

The LFS is used here to develop the time series on jobs, hours worked and wages and salaries by occupation, age and gender for each industry group in the HRM. As mentioned previously, the LFS is used in the CSNA to establish the total number of jobs.

#### **C.4 Survey of Employment, Payrolls and Hours**

The Survey of Employment, Payrolls and Hours (SEPH) is conducted monthly. It collects the number of employee jobs and payroll data from a sample of establishments in Canada.

In this survey, establishments are coded by industry through the Business Register, thereby providing a reliable source of timely information on the industry distribution of employee jobs and payrolls. The administrative data are supplemented by the monthly Business Payroll Survey of 11,000 businesses. This survey collects data on employment, earnings and paid or usual hours, according to whether workers are paid by the hour, salaried or remunerated some other way.

SEPH data on a NAICS basis are available back to 1991. Data on the number of jobs, hours paid and earnings are used here to break down the CPA estimates so that they correspond to the definition of tourism industries used in the Canadian Tourism Satellite Account (CTSA). As mentioned earlier, SEPH is also used extensively in the CSNA to determine the industry distributions of employee jobs.

## Appendix D: Methodology

The basic methodology consists of six steps:

1. taking totals from the Canadian System of National Accounts (CSNA) for jobs, hours worked, and wages and salaries
2. disaggregating these totals, using data from the CSNA for full-time and part-time jobs
3. distributing the CSNA totals for 2000 and 2005 across occupations, gender and age groups, and immigrant status based on census data
4. building time series from these benchmarks based on movements in corresponding series from the Labour Force Survey (LFS)
5. smoothing the time series for LFS occupations, while keeping the overall industry group totals
6. making limited, final adjustments to data values.

The following describes the methodology and implicit assumptions in more detail.

### Step 1: Benchmark totals

The industry group totals for jobs, hours worked, labour income and wages and salaries, including the details by class of worker (employee or self-employed), by full- and part-time status, are from the Canadian Productivity Accounts (CPA) database.

These data do not exactly meet requirements, however, and a number of adjustments are needed. In particular:

1. The labour component of mixed income from self-employment is imputed by multiplying the hours worked in self-employment by the average hourly wage per employee job. This method assumes that the self-employed and paid employees earn the same on average.<sup>32</sup> However, the imputation is imposed at the lowest level of the CPA database, resulting in differences in earnings between the self-employed and paid employees in tourism industry aggregates.
2. The CPA jobs data follow the CSNA version of the North American Industry Classification System (NAICS), which is simply a special aggregation that defines the working level (W level) industries of the Input-Output Tables. At this level, detail is available only for two parts of accommodation services, traveller accommodation (NAICS 7211) and RV parks, recreational campgrounds and rooming and boarding houses (NAICS 7212 + NAICS 7213 = 721A at the W level). An adjustment is required to remove rooming and boarding houses. This is done using details from the Survey of Employment Payroll and Hours (SEPH) on the industry's share of overall jobs, hours and earnings. These shares are used to adjust both employee and self-employment jobs. The same method is used to remove the non-tourism sub-industries of rail transportation (NAICS 4821), automotive equipment rental and leasing (NAICS 5321), food services and drinking places (NAICS 7220), performing arts, spectator sports and related industries (NAICS 7110) and amusement and recreation industries (NAICS 7131+ NAICS7132 + NAICS 7139 = 713A at the W level).

---

32. In past updates this imputation included supplementary labour income (SLI). However, the self-employed do not contribute to the majority of plans/programs included in SLI. As a result, starting with this update, SLI is excluded from labour income for the self-employed.

## Step 2: Distribution of CSNA data by full-time and part-time status

Data from the CPA database in the CSNA are used to split jobs, hours worked and income by full-time and part-time status.

## Step 3: Distribution of industry totals by occupation

Information on the occupational distribution of jobs comes from the census. Step 3 involves using this source to distribute the CSNA totals by occupation, gender, age group and immigrant status.

This step relates only to employee jobs, as occupational details are not developed for the self-employed. The Census of Population is used to distribute the industry group totals established in the second step for the years 2000 and 2005 (i.e., the reference years for the 2001 and 2006 censuses).

To develop occupational distributors for the industry group totals, special census tabulations are prepared, identifying persons in the tourism industries who had employment income in the reference year and were not self-employed. The selected persons are grouped according to their industry and whether they worked mainly full- or part-time during the reference year. For each of these groups the distribution of the (weighted) sample by occupation is determined, as well as the distribution of total hours worked and wage and salary income.

The occupational distributor for hours worked is based on the distribution of total hours (jobs multiplied by average hours worked) across occupations within each industry group.

The occupational distributor for wages and salaries is based on the distribution of total wages and salaries (jobs multiplied by hours worked multiplied by hourly earnings) across occupations in each industry group.

## Step 4: Building the occupational time series

Step 4 entails using the corresponding LFS annual average series by occupation, age group and gender to build a time series. Information on immigrant status while available from the LFS was not considered robust enough at the detailed level, and therefore the percentage distribution from the census reference years (2000 and 2005) is used. To take into account the change in the immigrant ratio between the two censuses, a linear interpolation is used. The LFS data are adjusted to the census levels to maintain growth rates between the census years.

## Step 5: Smoothing the LFS data

Step 5 entails smoothing (using a four-year moving average) to reduce volatility in the occupational time series found in the LFS. It is implemented in a way that preserves the overall industry group totals (from the CSNA) and the occupational distributions (from the 2001 and 2006 censuses).

A simple moving average is applied to the indicators (discussed in Step 3) used to build the time series on jobs, hours worked and wages and salaries, full-and part-time, by occupation and for each industry. A four-year moving average was judged to provide the best results overall in terms of reasonableness and consistency, reduced volatility, and minimizing the need for manual adjustments.

## Step 6: Other adjustments

The last step in developing the total industry estimates involves adjustments when the smoothed series appear out of line or generate erratic movements in the implied average annual hours or average hourly earnings. More specifically, adjustments are made if hourly earnings are more than four times higher than the corresponding occupation average or less than half of the Ontario minimum wage or if hours reported are more than 70 hours a week.<sup>33</sup> Results indicate that the smoothing and adjustments have little effect on the general pattern of the occupational distributions.

33. For details on Ontario minimum wage and standard hours for hours of work, see *Ontario Employment Standards Act, 2000* and regulations 285/01.

## **Appendix E: Tourism industries in the Human Resource Module**

This study uses the North American Industry Classification System (NAICS) 2002 to define the tourism-related industries. Briefly, NAICS is a comprehensive industry classification system encompassing all economic activities. It is designed for the compilation of production statistics and, therefore, for the classification of data relating to establishments (and locations). The criteria used to group establishments into industries in NAICS are similarity of input structures, labour skills or production processes used.

In order to maintain the reliability of the data, several tourism industries have been grouped together. Thus the tourism industry groups of the Human Resources Module (HRM) include:

### Transportation

- Air transportation

- All other transportation (includes rail, water, bus, taxi and vehicle rental)

### Accommodation

- Food and beverage services

- Recreation and entertainment

- Travel services.

Following is a detailed list of all tourism industries, including their NAICS codes.



## Detailed list of tourism industries by North American Industry Classification System (NAICS) 2002

### Transportation

#### Air transportation

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

#### All other transportation industries

- 4821 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
- 4831 Deep sea, coastal and great lakes water transportation
- 4832 Inland water transportation
- 4851 Urban transit systems
- 4852 Interurban and rural bus transportation
- 4853 Taxi and limousine service
- 4854 School and employee bus transportation
- 4855 Charter bus industry
- 4859 Other transit and ground passenger transportation
- 4871 Scenic and sightseeing transportation, land
- 4872 Scenic and sightseeing transportation, water
- 4879 Scenic and sightseeing transportation, other
- 5A0510<sup>1</sup> 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

### Accommodation

- 7211 Traveller accommodation
- 721A<sup>1</sup> RV (recreational vehicle) parks and recreational camps
  - 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

**Food and beverage services**

7220	Food services and drinking places of which:
	<b>Tourism sub-industries</b>
72211	Full-service restaurants
72221	Limited-service eating places
72241	Drinking places (alcoholic beverages)
	<b>Non-tourism sub-industries</b>
72231	Food service contractors
72232	Caterers
72233	Mobile food services

**Recreation and entertainment**

51213	Motion picture and video exhibition
7110	Performing arts, spectator sports and related industries of which:
	<b>Tourism sub-industries</b>
7111	Performing arts companies
7112	Spectator sports
7115	Independent artists, writers and performers
	<b>Non-tourism sub-industries</b>
7113	Promoters (presenters) of performing arts, sports and similar events
7114	Agents and managers for artists, athletes, entertainers and other public figures
7121	Heritage institutions
713A <sup>1</sup>	Amusement and recreation industries
7131	Amusement parks and arcades
7132	Gambling industries
7139	Other amusement and recreation industries of which:
	<b>Tourism sub-industries</b>
71391	Golf courses and country clubs
71392	Skiing facilities
71393	Marinas
71395	Bowling centres
71399	All other amusement and recreation industries
	<b>Non-tourism sub-industries</b>
71394	Fitness and recreational sports centres

**Travel services**

5615	Travel arrangement and reservation services
------	---

1. Special aggregation of NAICS industries in the Canadian System of National Accounts (CSNA).

## **Appendix F: Tourism occupations in the Human Resource Module**

This study uses the National Occupational Classification for Statistics (NOC-S) definitions of occupations. An occupation is defined in this classification as a collection of jobs, sufficiently similar in work performed to be grouped under a common title for classification purposes.

The selection of occupations is based on an examination of the occupational data for the 2001 Census for persons in the experienced labour force whose main job was in one of the tourism industry groups. Occupations with an estimated 5,000 employed persons or more were selected for this study. Occupations were added if the 2006 Census obtained more than 5,000 employed persons. Occupations were removed if the 2006 Census obtained fewer than 2,500 employed persons. These occupations were not common enough to support time series based on smaller samples from the Labour Force Survey (LFS). Between 2,500 and 5,000 employed persons, some occupations were removed. A detailed listing of occupations along with their NOC-S codes follows.

## Detailed list of tourism occupations by National Occupational Classification for Statistics (NOC-S) 2006

Occupations listed by tourism industry groups

NOC-S 2006

### Accommodation

Accommodation service managers . . . . .	A222
Program leaders and instructors in recreation, sport and fitness . . . . .	F154
Chefs . . . . .	G411
Cooks . . . . .	G412
Bartenders . . . . .	G512
Food and beverage servers . . . . .	G513
Hotel front desk clerks . . . . .	G715
Light duty cleaners . . . . .	G931
Janitors, caretakers and building superintendents . . . . .	G933
Food counter attendants, kitchen helpers and related occupations . . . . .	G961
All other accommodation occupations	

### Transportation

#### Air transportation

Air pilots, flight engineers and flying instructors . . . . .	C171
Pursers and flight attendants . . . . .	G712
Airline sales and service agents . . . . .	G713
Aircraft mechanics and aircraft inspectors . . . . .	H415
Air transport ramp attendants . . . . .	H737
All other air transportation occupations	

#### All other transportation

Transportation managers . . . . .	A373
Retail salespersons and sales clerks . . . . .	G211
Automotive service technicians, truck and bus mechanics and mechanical repairers . . . . .	H421
Bus drivers and subway operators and other transit operators . . . . .	H712
Taxi and limousine drivers and chauffeurs . . . . .	H713
Railway and yard locomotives engineers . . . . .	H721
Railway conductors and brakemen/women . . . . .	H722
All other transportation occupations	

### Food and beverage services

Restaurant and food service managers . . . . .	A221
Food service supervisors . . . . .	G012
Cashiers . . . . .	G311
Chefs . . . . .	G411
Cooks . . . . .	G412
Maitres d'hôtel and hosts/hostesses . . . . .	G511
Bartenders . . . . .	G512
Food and beverage servers . . . . .	G513
Bakers . . . . .	G942
Food counter attendants, kitchen helpers and related occupations . . . . .	G961
Delivery and courier service drivers . . . . .	H714
All other food and beverage services occupations	

Occupations listed by tourism industry groupsNOC-S 2006**Recreation and entertainment**

Recreation, sports and fitness program and service directors .....	A343
Technical occupations related to museums and art galleries .....	F112
Program leaders and instructors in recreation, sport and fitness .....	F154
Retail salespersons and sales clerks .....	G211
Cashiers .....	G311
Security guards and related occupations .....	G631
Casino occupations .....	G723
Operators and attendants in amusement, recreation and sport .....	G731
Janitors, caretakers and building superintendents .....	G933
Food counter attendants, kitchen helpers and related occupations .....	G961
Landscaping and grounds maintenance labourers .....	I212
All other recreation and entertainment occupations	

**Travel services**

Retail trade managers .....	A211
Travel counsellors .....	G711
All other travel services occupations	

## Appendix G: Table structure

The structure of the Human Resource Module (HRM) tables is detailed below.

Tables are available on demand for each of the five tourism industry groups (see Appendix C) included in the HRM, as well as a total for all industries. Details are also available on the air transportation and all other transportation sub-industries of the transportation industry group.

Total employment, hours worked and wages and salaries are available for each industry group. Derived variables including average annual hours worked, average annual wage and salary and average hourly wages are also included.

These variables are split into the following categories:

- a. Full-time female
- b. Part-time female
- c. Full-time male
- d. Part-time male
- e. Total male
- f. Total female
- g. Total part-time
- h. Total full-time
- i. Total

Each of the above categories are split into occupational details (see Appendix F).

The categories "e" to "h" are further split into immigrants and non-immigrants, while the category "i" is further divided up into four age categories: (15 to 24, 25 to 34, 35 to 44, 45 and over).

It might be noted that for publication purposes, cells of the HRM tables are suppressed whenever the estimated number of jobs is less than twenty. Below this threshold, the data are considered confidential.

Tables on annual employment in tourism industries are now available upon request. Custom tabulations are also now available (\$). Tables on the annual employment directly attributable to tourism (i.e., tourism employment) and quarterly data are a work-in-progress. For more information, contact the information officer (613-951-3640; [iead-info-dcrd@statcan.gc.ca](mailto:iead-info-dcrd@statcan.gc.ca)), Income and Expenditure Accounts Division.

## Glossary of terms

**Basic prices:** A basic price valuation including the costs of production factors (labour and capital) and indirect taxes and subsidies on production factors. It represents essentially the prices received by the sellers, and does not include taxes on the sales of goods and services.

**Employee jobs:** All jobs in which the person employed draws compensation for services rendered and for whom the employer must complete a Revenue Canada T4 form. Jobs in which workers are paid by tips or commissions are included. Self-employed proprietors of unincorporated enterprises and unpaid family workers are not included.

**Full-time job:** One in which a person usually works 30 hours or more per week.

**Full-time equivalent employment:** Is the number of full-time equivalent jobs.

**Full-time equivalent (FTE) jobs:** Is defined as total hours worked divided by average annual hours worked in full-time jobs. This can also be described as full-time-equivalent work-years. It is a less precise alternative to expressing labour input in terms of total hours worked.

**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.

**Hours worked:** Actual hours worked during normal periods of work, including overtime but excluding paid leave (e.g., holidays, sick leave).

**Immigrant:** In this study, an immigrant is defined as a person who is a landed immigrant (or has been and has become a Canadian citizen) or a non-permanent resident. A landed immigrant is a permanent resident who is not a Canadian citizen at birth. A non-permanent resident is a person who holds a study or work permit or who is a refugee claimant or is a family member living with this refugee claimant.

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

**Job:** A job is defined as an explicit or implicit contract between a person and an institutional unit to perform work in return for compensation for a defined period or until further notice. The institutional unit may be the proprietor of an unincorporated enterprise; in this case the person is described as being self-employed and earns a mixed income. The number of jobs exceeds the number of persons employed by the number of second, third, etc. jobs.

**Jobs generated by tourism:** Jobs that can be directly attributed to tourism demand.

**Labour force:** The civilian non-institutional population 15 years of age and over who are either employed or unemployed.

**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).

**Main job:** The job at which the most hours are worked.

**Market prices:** A valuation expressed in terms of the prices actually paid by the purchaser, that is, after all applicable taxes (including taxes on the sale of goods and services) and subsidies.

**Mixed income:** Mixed income is a balancing item in the industry accounts of the 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.

**Multiple-job holder:** A person who is employed in more than one job during the reference period.

**Non-immigrant:** In this study, a non-immigrant is a person who is a Canadian citizen at birth.

**Occupation:** A collection of jobs, sufficiently similar in work performed (tasks, duties and responsibilities) to be grouped under a common title for classification purposes.

**Part-time job:** One in which a person usually works less than 30 hours per week.

**Satellite account:** An accounting system that follows the basic principles of the System of National 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.

**Self-employment jobs:** Includes working-owners of unincorporated enterprises, and members of their households who work without a wage or salary (i.e., unpaid family workers).

**Supplementary labour income:** 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 contribution, worker's compensation, health and life insurance plans, and retirement allowances.

**System of National Accounts (SNA):** The System of National Accounts (SNA) 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 Accounts (CSNA) bears a close relationship to the international standard as described in the United Nations publication: *System of National Accounts 1993*.

**Total hours worked:** The aggregate number of hours actually worked during the year in employee and self-employment jobs.

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

**Tourism employment:** The number of jobs in tourism and non-tourism industries that can be directly attributed to tourism demand. Someone who works 10 hours a week counts for as much, by this measure, as someone who works 50 hours a week. This is also called "employment generated by tourism".

**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 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.

**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:** Consists 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 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.

## References

- Akyeampong, Ernest. 1999. "Saving for retirement: RRSPs and RPPs." *Perspectives on Labour and Income*. Vol.11, no. 2. Statistics Canada, catalogue no. 75-001-XIE. p. 21-27.  
<http://www.statcan.gc.ca/studies-etudes/75-001/archive/e-pdf/4602-eng.pdf> (accessed April 27, 2010).
- Akyeampong, Ernest and Deborah Sussman. 2003. "Health-related insurance for the self-employed." *Perspectives on Labour and Income*. Vol.4, no.5. Statistics Canada, catalogue no. 75-001-XIE. p. 13-18.  
<http://www.statcan.gc.ca/pub/75-001-x/75-001-x2003105-eng.pdf> (accessed April 27, 2010).
- Barber-Dueck, Conrad and Demi Kotsovos. 2003. *The Provincial and Territorial Satellite Accounts for Canada, 1998*. Statistics Canada, catalogue no.13-604-MIE. Ottawa, Ontario. 80 p. Income and Expenditure Accounts Technical Series, no. 40.  
<http://www.statcan.gc.ca/pub/13-604-m/13-604-m2003040-eng.pdf> (accessed April 27, 2010).
- Bisaillon, Monique. 2010. *Human Resource Module of the Tourism Satellite Account: A Pilot Study for Ontario*. Statistics Canada, catalogue no. 13-604-MIE. Ottawa, 42 p. Income and Expenditure Accounts Technical Series, no. 65.  
<http://www.statcan.gc.ca/pub/13-604-m/13-604-m2010065-eng.pdf> (accessed April 27, 2010).
- Bisaillon, Monique and Charles Morissette. 2009. *Human Resource Module of the Tourism Satellite Account, 2007*. Statistics Canada, catalogue no. 13-604-MIE. Ottawa, Ontario. 36 p. Income and Expenditure Accounts Technical Series, no. 61.  
<http://www.statcan.gc.ca/pub/13-604-m/13-604-m2009061-eng.pdf> (accessed April 27, 2010).
- Cañada, Agustín, J. Prado and R. Roig. 2004. "The measurement of employment in tourism – Spain." Presented at joint *Organisation for Economic Co-operation and Development and Austrian Ministry of Economics and Labour seminar on Tourism, Economics and Labour*. Vienna, December 14.
- Canadian Tourism Human Resource Council. 2008a. "The future of Canada's tourism sector: long on prospects – short on people." Prepared by The Canadian Tourism Research Institute, The Conference Board of Canada and The Bristol Group. Ottawa, Ontario. 38p.  
[http://cthrc.ca/~media/Files/CTHRC/Home/research\\_publications/labour\\_market\\_information/sd-supply-demand-report-en.ashx](http://cthrc.ca/~media/Files/CTHRC/Home/research_publications/labour_market_information/sd-supply-demand-report-en.ashx) (accessed April 27, 2010).
- . 2008b. "In short supply: tourism – more jobs than workers." Prepared by the Conference Board of Canada, Ottawa, Ontario.
- . 2009. "The future of Canada's tourism sector: labour shortages to re-emerge as economy recovers." Prepared by the Conference Board of Canada, Ottawa, Ontario.
- Commission of the European Communities, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations and World Bank. 1993. *System of National Accounts 1993*. Brussels, Luxembourg, New York, Paris, Washington.
- Commission of the European Communities, Organisation for Economic Co-operation and Development, World Tourism Organization and United Nations Statistics Division. 2001. *Tourism Satellite Account: Recommended Methodological Framework*. Luxembourg, Madrid, New York, Paris.
- Hoekstra, Rutger. 2004. "Labour in the Dutch TSA." Presented at joint *Organisation for Economic Co-operation and Development and Austrian Ministry of Economics and Labour seminar on Tourism, Economics and Labour*. Vienna. December 14.

- Jackson, Chris. 2007. *Human Resource Module of the Tourism Satellite Account, Update to 2005*. Statistics Canada, catalogue no. 13-604-MIE. Ottawa, Ontario. 28 p. Income and Expenditure Accounts Technical Series, no. 55. <http://www.statcan.gc.ca/pub/13-604-m/13-604-m2007055-eng.pdf> (accessed April 27, 2010).
- Kemp, Katharine and Shaila Nijhowne. 2004. "Study of the Canadian Tourism Satellite Account: Comparison of the TSA-RMF and CTSA." Report prepared for the *Canadian Tourism Commission for the meetings of the Macroeconomics and Statistics Sub-Committee of the World Tourism Organization*. Madrid. March 8-9. <http://dsp-psd.pwgsc.gc.ca/Collection/C86-191-2004E.pdf> (accessed April 26, 2010).
- Kotsovos, Demi. 2007. *Canadian Tourism Satellite Account Handbook*. Statistics Canada, catalogue no. 13-604-MIE. Ottawa, Ontario. 86 p. Income and Expenditure Accounts Technical Series, no. 52. <http://www.statcan.gc.ca/pub/13-604-m/13-604-m2007052-eng.pdf> (accessed April 27, 2010).
- . 2009. *Canadian Tourism Satellite Account, 2004*. Statistics Canada, catalogue no. 13-604-MIE. Ottawa, Ontario. 34 p. Income and Expenditure Accounts Technical Series, no. 63. <http://www.statcan.gc.ca/pub/13-604-m/13-604-m2009063-eng.pdf> (accessed April 26, 2010).
- Laimer, Peter and Petra Öhlböck. 2004. "A TSA-Employment Module for Austria." Presented at joint *Organisation for Economic Co-operation and Development and Austrian Ministry of Economics and Labour seminar on Tourism, Economics and Labour*. Vienna, December 14.
- Marshall, Katherine. 2000. "Part-time by choice." *Perspectives on Labour and Income*. Vol. 1, no. 2. Statistics Canada, catalogue no. 75-001-XIE. p. 20-27. <http://www.statcan.gc.ca/studies-etudes/75-001/archive/e-pdf/5608-eng.pdf> (accessed April 26, 2010).
- Maynard, Jean-Pierre. 2005. *Annual measure of the volume of work consistent with the SNA: The Canadian Experience*. Statistics Canada, catalogue no. 11F0026MIE. Ottawa, Ontario. 30 p. Economic Analysis Methodology Paper Series: National Accounts, no. 5. <http://www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=11F0026MIE2005005&lang=eng> (accessed April 27, 2010).
- Mohan, M., G. Gislason, and B. McGowan. 1998. "Tourism-related employment: 1998 update." Prepared for the Canadian Tourism Human Resource Council.
- Morissette, Charles and Berouk Terefe. 2008. *Human Resource Module of the Tourism Satellite Account, Update to 2006*. Statistics Canada, catalogue no. 13-604-MIE. Ottawa, Ontario. 28 p. Income and Expenditure Accounts Technical Series, no. 59. <http://www.statcan.gc.ca/pub/13-604-m/13-604-m2008059-eng.pdf> (accessed April 27, 2010).
- Ontario Ministry of Tourism. 2009. "Discovering Ontario – A report on the future of tourism." Prepared by the Ontario Tourism Competitive Study. Toronto.
- Organisation for Economic Co-operation and Economic Development. 2000. "Measuring the Role of Tourism in OECD Economies, the OECD Manual on Tourism Satellite Accounts and Employment." Paris.
- Statistics Canada. 1976. Labour Force Information. Statistics Canada, catalogue no. 71-001-XIE. Ottawa, Ontario. <http://www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=71-001-XIE&lang=eng> (accessed April 27, 2010). Monthly.
- . 1995. Canadian Civil Aviation. Statistics Canada, catalogue no. 51-206-XIB, Ottawa, Ontario. <http://www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=51-206-X&lang=eng> (accessed April 27, 2010). Annual.

- . 1996. *National Tourism Indicators*. Statistics Canada, catalogue no. 13-009-XIE, Ottawa, Ontario.  
<http://www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=13-009-XIE&lang=eng> (accessed April 27, 2010).  
Quarterly.
- . 2008. *Guide to the Income and Expenditure Accounts*. Statistics Canada, catalogue no. 13-017-XIE. Ottawa, Ontario. 297 p.  
<http://www.statcan.gc.ca/pub/13-017-x/13-017-x2008001-eng.pdf> (accessed April 27, 2010)
- . 2009. "Labour statistics consistent with the System of National Accounts." *The Daily*. December 11. Statistics Canada, catalogue no. 11-001-XIE. p. 8.  
<http://www.statcan.gc.ca/daily-quotidien/091211/dq091211f-eng.htm> (accessed April 26, 2010).
- . 2010a. "GDP by income and by expenditure." *Canadian Economic Accounts Quarterly Review*. Vol.8 no.4. Fourth quarter 2009. Statistics Canada, catalogue no. 13-010-XIE.  
<http://www.statcan.gc.ca/pub/13-010-x/13-010-x2009004-eng.htm> (accessed April 26, 2010).
- . 2010b. *National Tourism Indicators, Quarterly Estimates*. Fourth quarter 2009. Statistics Canada, catalogue no. 13-009-XIE, Ottawa, 46 p.  
<http://www.statcan.gc.ca/pub/13-009-x/13-009-x2009004-eng.pdf> (accessed April 27, 2010)
- Wright, Jennifer. 2007. "Total Tourism Sector Employment in Canada: 2006 Update." Canadian Tourism Human Resource Council, Ottawa, Ontario.

## 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.gc.ca](http://www.statcan.gc.ca), by contacting us at (613) 951-3810, by email to [iead-info-dcrd@statcan.gc.ca](mailto:iead-info-dcrd@statcan.gc.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 Rebased 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", *Income and Expenditure Accounts Technical Series*, February 2002.
38. "The Provincial and Territorial Tourism Satellite Accounts for Canada, 1996", *Income and Expenditure Accounts Technical Series*, April 2002.

39. "Purchasing Power Parities and Real Expenditures, United States and Canada", reprinted from *Income and Expenditure Accounts*, first quarter 2002.
40. "The Provincial and Territorial Tourism Satellite Accounts for Canada, 1998", *Income and Expenditure Accounts Technical Series*, June 2003.
41. "Government revenue attributable to tourism, 1998", *Income and Expenditure Accounts Technical Series*, September 2003.
42. "Chain Fisher Index Volume Methodology", *Income and Expenditure Accounts Technical Series*, November 2003.
43. "Trends in provincial and territorial economic statistics: 1981-2002", *Income and Expenditure Accounts Technical Series*, November 2003.
44. "The 1997-2003 Revisions of the National Tourism Indicators", *Income and Expenditure Accounts Technical Series*, October 2004.
45. "A study of data revisions to the National Tourism Indicators", *Income and Expenditure Accounts Technical Series*, October 2004.
46. "Provincial and Territorial Economic Accounts", *Income and Expenditure Accounts Technical Series*, November 2004.
47. "Revisions to the Canadian National Tourism Indicators", *Income and Expenditure Accounts Technical Series*, January 2005.
48. "Canadian Tourism Satellite Accounts, 2000", *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", *Income and Expenditure Accounts Technical Series*, March 2006.
52. "Canadian Tourism Satellite Account Handbook", *Income and Expenditure Accounts Technical Series*, December 2007.
53. "Purchasing Power Parities and Real Expenditures, United States and Canada, 1992-2005", *Income and Expenditure Accounts Technical Series*, February 2007.
54. "Recent Trends in Output and Employment", *Income and Expenditure Accounts Technical Series*, February 2007.
55. "Human Resource Module of the Tourism Satellite Account, Update to 2005", *Income and Expenditure Accounts Technical Series*, March 2007.
56. "The Canadian Research and Development Satellite Account, 1997 to 2004", *Income and Expenditure Accounts Technical Series*, May 2008.
57. "Government Revenue Attributable to Tourism, 2000 to 2006", *Income and Expenditure Accounts Technical Series*, September 2007.
58. "Canadian Tourism Satellite Account, 2002", *Income and Expenditure Accounts Technical Series*, October 2007.
59. "Human Resource Module of the Tourism Satellite Account, Update to 2006", *Income and Expenditure Accounts Technical Series*, April 2008.
60. "Government Revenue Attributable to Tourism, 2007", *Income and Expenditure Accounts Technical Series*, November 2008.

61. "Human Resource Module of the Tourism Satellite Account, 2007", *Income and Expenditure Accounts Technical Series*, May 2009.
62. "Real Import and Export Adjustments to Account for Exchange Fluctuations", *Income and Expenditure Accounts Technical Series*, November 2009.
63. "Canadian Tourism Satellite Account, 2004", *Income and Expenditure Accounts Technical Series*, December 2009.
64. "Purchasing Power Parities, United States and Canada, 2002 to 2008", *Income and Expenditure Accounts Technical Series*, February 2010.
65. "Human Resource Module of the Tourism Satellite Account: A pilot project for Ontario", *Income and Expenditure Accounts Technical Series*, March 2010.
66. "Human Resource Module of the Tourism Satellite Account, 2009", *Income and Expenditure Accounts Technical Series*, May 2010.