



Economic Impact Assessment of the Whitehorse 2007 Jeux du Canada Games

Submitted by



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Executive summary

This study — commissioned by the Whitehorse 2007 Canada Games Host Society — presents an analysis of the economic impacts of spending related to the Canada Winter Games held in Whitehorse, Yukon, from February 23 to March 10, 2007. The assessment is not a cost-benefit analysis, it cannot measure costs and benefits over time nor can it provide measures to judge whether an equivalent expenditure of government funds on something else would have generated more or less benefit.

An economic impact analysis is a standard economic tool designed to measure the total economic effect of an injection of funds into an economy. Economic impacts include “*direct effects*” on a number of economic variables created directly by spending on the project, “*indirect effects*” on suppliers of goods and services to the project, and “*induced effects*” resulting from the re-spending of income generated by the original spending. We do not calculate induced effects here because Statistics Canada’s *Inter-provincial Open Input-Output model* — the only rigorous economic model currently available for the Yukon economy — excludes induced effects and therefore does not provide the appropriate multipliers. Our overall approach and choice of methodology is designed to produce a rigorous and prudent analysis of the Games’ economic impacts.

Highlights

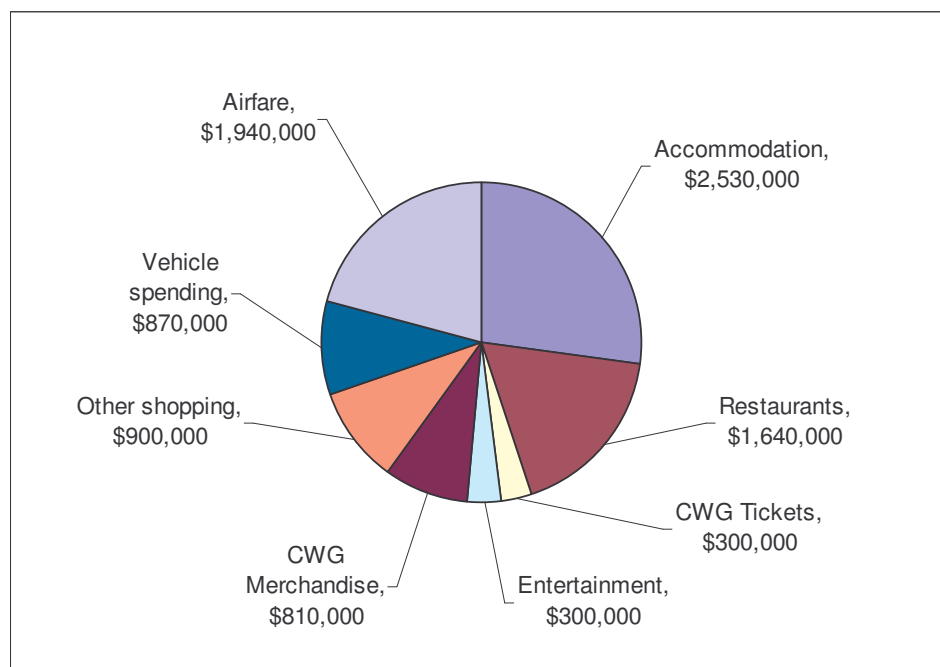
Total economic injection into the Yukon economy from 2003 to 2007	\$94.8 million
Capital spending for infrastructure	\$69.1 million
Operations spending for Yukon goods and services	\$12.6 million
Operational salaries and benefits	\$4.4 million
Visitor spending	\$8.7 million
Total direct and indirect impacts on the Yukon economy	
GDP	\$60.2 million
Employment	1,167 person-years
Incomes	\$39.8 million
Indirect taxes	\$2.6 million
Total direct impacts on the Yukon economy	
GDP	\$36.5 million
Employment	840 person-years
Incomes	\$26.8 million
Indirect taxes	\$1.2 million
Total visitors	7,599
Athletes	2,654
Coaches/managers/officials/artists	1,493
Media/mission staff/VIPs	1,757
Outside visitors	1,695
Total number of assigned volunteers	3,889

Capital and operations spending

- ◆ Capital and operations spending data were obtained from the Host Society, the Yukon government and the City of Whitehorse.
- ◆ Capital spending required to prepare infrastructure for the Games totalled \$69.1 million from 2003 through to 2007, with the Canada Games Centre and the Athletes' Village making up the bulk of that figure.
- ◆ Operations spending from 2003 to 2007 totalled \$27.7 million, including \$12.6 million for Yukon goods and services and \$4.4 million in salaries and benefits for the 100 full-time equivalent positions created by the Host Society's operational needs.
- ◆ Nearly 4,000 volunteers — 15% of the Yukon's population aged 15 and up — worked on the Games.

Visitor spending

- ◆ The Host Society kept track of the number of athletes, coaches, volunteers, provincial/territorial mission staff, and media. The number of independent visitors including relatives, friends and others was estimated based on ticket sales and counts of Yukoners and visitors taken at the different venues where a total of 997 people were surveyed on their spending.
- ◆ Visitors directly spent an estimated \$9.3 million in the Yukon during the Games, much of it on accommodation, airfare and food service. (Of that total, only \$8.7 million is considered an economic injection for estimating economic impacts in order to avoid double counting of, e.g., CWG tickets). Note that these spending numbers include neither the \$4 million spent on flying in athletes and provincial delegations, nor any spending by the Host society in lodging or feeding athletes, provincial delegations and VIPs.



- ◆ An additional \$2 million was spent by visitors in the rest of Canada, mostly for airfares.
- ◆ Sports Canada attempted to collect data on corporate spending by media organizations in the Yukon during the Games with mixed success. Because the data is incomplete and we have no reliable way of ensuring that the spending is not already accounted for in other categories, we have not included this spending in our estimate of impacts.

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Economic Impact Assessment of the Whitehorse 2007 Jeux du Canada Games

1 Introduction

This study — commissioned by the Whitehorse 2007 Canada Games Host Society — presents an analysis of the economic impacts of spending related to the Canada Winter Games held in Whitehorse, Yukon, from February 23 to March 10, 2007. The focus of the analysis is on economic impacts on the Yukon's economy, but some economic effects on other jurisdictions in Canada are also included.

An economic impact assessment is a standard economic tool designed to measure the total economic effect of an injection of funds into an economy. The assessment is a snapshot, measuring the impact of that injection at a fixed point in time. The assessment is not a cost-benefit analysis, it cannot measure costs and benefits over time nor can it provide measures to judge whether an equivalent expenditure of government funds on something else would have generated more or less benefit. Cost-benefit analyses are usually conducted in order to help decide whether a particular project is more or less economically desirable when measured against alternative uses of funds.

Measuring the total economic impact of a project is not simply a matter of adding up total spending or total costs. An economy is a complex arrangement of interrelated industries, firms, and individuals and injecting additional funds into it can have widely varying effects depending on which industries are most involved in making the project happen. For example, additional spending on the construction of buildings in the Yukon will have a much greater impact on employment in the territory than the same spending on the bulk purchase of fuel as building construction is a much more labour-intensive industry than fuel wholesaling. Similarly, spending on bulk fuel in the Yukon tends to have a much smaller overall economic impact (as measured by the GDP or gross domestic product) than, e.g. retail sales, because a great deal more of the overall cost of the fuel purchased here immediately flows out of the territory to pay for its import.

The calculation of economic impacts requires the use of a model that accurately captures, at least in broad terms, how the Yukon economy's various industries interact with one another and with the economies of other jurisdictions. For this analysis we are using the latest available version (2003) of *Statistics Canada's Inter-provincial Open Input-Output model* — the only rigorous economic model available for the Yukon economy. (Other models either do not separate out the Yukon, or yield questionable results for the Yukon context by using multipliers that overstate indirect and induced impacts).

Economic Impacts

Economic impacts are usually classified as direct, indirect or induced.

Direct impacts:

The value-added increase in employment, local incomes, and local GDP retained in the area, and tax receipts to all governments created directly by spending on the project.

Indirect impacts:

The value-added increase in employment, local incomes and local GDP retained in the area, and tax receipts to all governments from local suppliers of goods and services to the project.

Induced impacts:

The increase in employment, local incomes, local GDP, and tax receipts from the spending and re-spending of all labour income generated by the original expenditure.

The model provides us with multipliers for different industries that capture the overall effect of new spending on goods or services within a particular industry. We use these multipliers here to present the direct and indirect impacts of Canada Games-related spending on GDP, labour income, employment, and some taxes. These effects are calculated for each year spending occurred, from 2003 through 2007. While induced effects will not be quantified (see Section 1.1 below), these are discussed in the analysis.

1.1 Overall approach and methodology

Economic impact assessments are a standard and frequently used economic tool; they can, however, be subject to many variables in approach and methodology. Our overall approach and choice of methodology is designed to produce a rigorous and prudent analysis of the economic impacts, not an exaggerated advocacy analysis.

Our overall approach is to break out the economic injection of the Canada Winter Games into three broad categories: capital spending, operations spending, and visitor spending. To produce a rigorous analysis we take the following approach:

- Only incremental or additional spending — spending that would likely not have occurred in the absence of the Games — is included as an economic impact. Not all Canada Games-related spending could be included. For example, the capital spending on the swimming pool portion of the Canada Games Centre is not included as the pool was being built regardless of the Games.
- We make every effort to avoid the double counting of spending connected to the Games. Wherever there is the possibility of double counting we explicitly lay out how we have attempted to avoid an exaggerated outcome.
- Only visitor spending directly connected with the Games — from those who would not have come to the Yukon otherwise — is counted as an economic injection.
- The Games received substantial contributions in-kind — everything from flights to flowers — from sponsors in the Yukon and across Canada. We have treated in-kind contributions as additional spending producing Games-related economic impacts on the assumption that these goods and services would not have flowed into the Yukon economy without the Games.
- As noted above, we are using Statistics Canada's Input-Output model, which provides multipliers for direct and indirect impacts but not for induced impacts. Because Statistics Canada found that the multipliers for induced impacts were often misapplied or misused they are no longer included in the model. Therefore, although induced impacts are real and can be significant, they cannot be estimated with the required degree of rigour and we do not attempt to quantify them.

Throughout this report we make every effort to explain any assumptions used and to explicitly lay out the reasons for the choice of one particular approach to the data over another. There are many wrinkles and complexities in calculating the economic impacts of the 2007 Canada Winter Games that make it a more complex exercise than many economic impact assessments. We attempt to clearly explain these complexities and to anticipate possible concerns with how they should be dealt with.

2 Data sources and collection methodology

Acquiring the raw data needed to calculate the capital and operations spending for the 2007 Canada Winter Games was straightforward; the Host Society, the Yukon government and the City of Whitehorse kept detailed records of capital and operations spending that were made available to us for this analysis. Data for the third major source of economic injection, visitor spending, required far more effort: we undertook a face-to-face survey of 997 visitors during the Games

2.1 Capital spending

Capital spending data was obtained from the City of Whitehorse and from the Government of Yukon. The City of Whitehorse data focussed on the sources of funding and expenditures on the Canada Games Centre. Expenditure data was available by calendar year beginning in 1999 and running through early 2007. For this assessment we are using only the expenditures needed to build Phase II of the Canada Games Centre. Phase I was the construction of the swimming pool portion of the current complex and that project was not directly connected with the Games — Whitehorse was replacing its swimming pool in any event. Funding and expenditures for Phase II begin in the 2003 calendar year.

The Yukon government capital expenditure data, focussed on the Athletes' Village and miscellaneous other capital projects, was broken out by fiscal year from 2003/04 through 2007/08. Because we are looking at economic impacts by calendar year and do not have a more detailed breakdown of when the spending actually occurred, the expenditures for each fiscal year are assumed to occur in the first year, e.g., for 2006/07 the expenditure is assumed to have happened in 2006.

The data on capital spending is presented in Section 3.1 below.

2.2 Operations spending

The spending on organizing and operating the Games is broken out into two categories: payroll expenses and operations spending. The Host Society provided a summary of total Host Society payroll and full time equivalent employment by year while the Yukon government provided payroll data for staff who worked on secondment for the Games but were paid through the government payroll.

Canada Winter Games Society staff provided data on operations spending for each calendar year of operation, from 2003 through 2007. Spending was broken out by vendor and/or the type of good or service provided. We have coded all of the operations spending using the North American Industry Classification System (NAICS 2002) to closely match Statistics Canada's Inter-provincial Input-Output model categories. The data was also coded by location of the seller.

Summaries of the operations spending are presented in Section 3.2 below, while a more detailed view of the data can be found in the Appendix 5.1 at the end of the document.

2.3 Visitor spending

Visitor spending data was obtained through a survey of visitors to Whitehorse over the course of the Games. Most data was collected through an intercept survey done at different venues and at the airport during the Games and additional data came from a follow-up web-based survey for groups that were under-represented in the survey.

In addition, we obtained total travel costs from MKI Travel who arranged travel by athletes and coaches to Whitehorse.

2.3.1 Survey instrument

The questions in the survey instrument — presented in Appendix 5.2 —were designed to estimate both the number of visitors and their spending. Two different instruments were used: a tally sheet and the questionnaire. The tally sheet was used to count ALL persons entering the venue. Each person was identified as a Yukoner or non-Yukoner and the type of ticket they were using that day was noted. Non-Yukoners were then asked to complete the questionnaire. Not all were able to do so, due to lack of time or refusal to participate.

The first question on the respondent's role was used both to estimate the number of visitors and for imputation purposes. The questions on venues and types of tickets were useful in estimating the number of visitors. While the Canada Games society did provide the number of athletes, coaches, VIPs and media representatives, there was no count of independent visitors such as parents and friends of athletes and these had to be estimated as part of the survey.

Questions 6 to 12 were used to estimate total visitor spending. In addition, some questions were asked to look at the likelihood of visitors to come to the Yukon and the other two territories in the future.

2.3.2 Sampling and weighting

The initial goal was to obtain a sample size large enough to draw inferences at ± 5 percentage points with 95% confidence for most groups and ± 7.5 percentage points for media and VIPs. DataPath Systems prepared a detailed sampling plan (presented in Appendix 5.3) that specified the required number of responses and where the interviewing would be done. Most of the interviews were planned for venues towards the end of each week so that respondents would have a better idea of their spending. While the weather did not co-operate most of the work took place as scheduled. However, due to low turnout at some events, additional events and locations were added to obtain as many completed interviews as possible.

It was anticipated that a telephone survey of VIPs and media would be required. However, because of privacy concerns, the Games Society did not provide us with their telephone numbers. Emails were sent to the group to invite them to respond to an on-line survey. This resulted in 37 additional responses (included in the total of 997).

Table 1 below presents the number of responses planned for and the actual survey responses. Despite the challenge with the weather and the inability to complete a telephone survey, the margins of error are acceptable and not far from the targets. The overall margin of error is ± 2.9 percentage points at 95% confidence. Weights were assigned to each observation in each group based on universe size. Universe size for every group except for independent "Outside visitors" was provided by the Canada Winter Games Society.

We estimated the number of independent visitors based on ticket sales and tallies of attendance at the venues where interviews were conducted. It should be noted that a tally was kept of individuals who, when approached by an interviewer, stated they were from the Yukon and were therefore not interviewed. Yukoners were also asked what kind of ticket they held, as were visitors.

Table 1 Universe, sample sizes, and margin of error at 95% confidence

<i>Target Group</i>	<i>Original forecast universe</i>	<i>Actual universe size</i>	<i>Original target</i>	<i>Actual completes</i>	<i>Margin of error</i>
Athletes	2,700	2,654	336	340	± 5.0%
Coaches/managers/officials/artists	1,450	1,493	153	192	± 6.6%
Media/mission staff/VIPs	1,000	1,757	233	134	± 8.1%
Independent Outside visitors	3,500	1,695	818	332	± 4.8%
TOTAL Attendees	8,650	7,599	1,540	997	± 2.9%

The actual numbers for the universes of Athletes, Coaches/managers/officials/artists and Media/mission staff/VIPs was provided by the Canada Winter Games Society. The total of 1,695 independent visitors was derived by taking the ticket sales and applying the following logic:

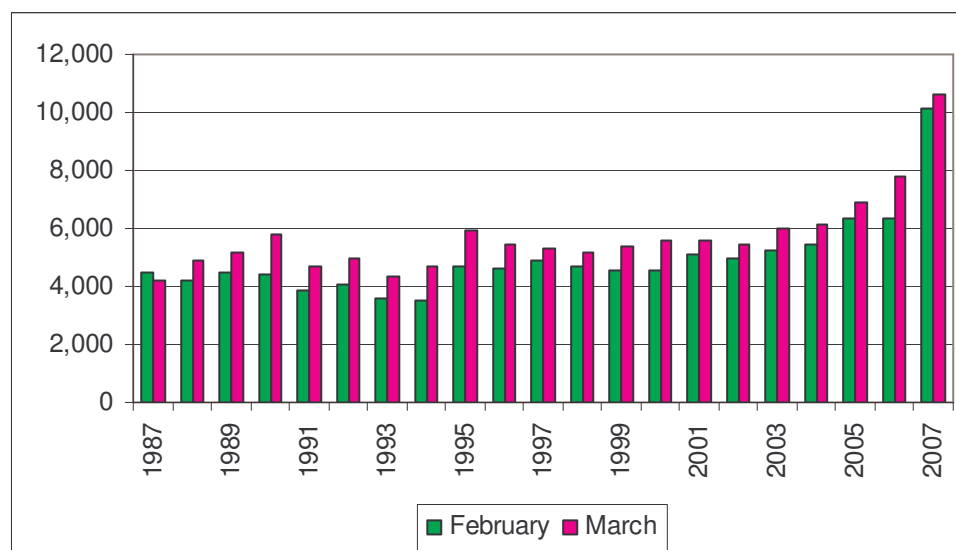
- Reducing ticket sales by the ratio of Yukoners as determined in the tallies;
- Reducing the ticket sales by the average number of tickets purchased per person in each ticket type;
- Reducing that figure by the percentage of overlap between ticket types (i.e. the percentage of people would be showing up in more than one ticket type); and,
- Reducing that figure by the percentage of visitors who identified themselves as an athlete, coach, trainer, manager, official, judge, referee, chef de mission, media, other volunteer or performer.

We also experimented with another method using the ratio of the events where we had interviewers compared to the total events and assuming that the same average number and type of tickets were used for all events. This yielded 1,436 independent visitors rather than the 1,695 determined based on ticket sales and tally results.

To corroborate these numbers, we also did a separate regression analyses on “deplanements” (or arrivals) at the Whitehorse airport for February and March from 1987 to 2007. As Figure 1 below shows, there was a massive spike in Whitehorse arrivals during February and March 2007 compared to other years. Explanatory or control variables in the regression analysis included: time, Yukon population, Consumer Price Index for intercity transportation, personal disposable income & a dummy variable for 2007. The dummy variable for February and March 2007 should capture the effect of the Games on deplanements. We did not use “enplanements” as that number for February would also include local residents who left as well as people leaving after the first week at the Games.

The estimated value of the dummy variable was 4,288 for February and 3,787 for March. So the total was an estimated 8,075 extra arriving passengers in those two months. The 8,075 figures is composed of athletes, coaches, officials, media representatives, VIPs, etc.; Yukon residents who left because of the games; and independent visitors. As was noted above, the Canada Winter Games Society provided the number of athletes, coaches, officials, media and VIPs. To corroborate the estimate of independent visitors, the number of known visitors (athletes, etc.), and the number of Yukon residents who left because of the Games. However, we do not have a figure for Yukoners who left just because of the Games (and who would not have left otherwise). Using the 1,695 estimated independent visitors, this would mean that about 476 extra Yukoners left in those two months, which seems a reasonable number.

**Figure 1 Deplanements, Whitehorse International Airport,
February and March 1987-2007**



2.3.3 Imputations and clean-up

The survey instrument included a number of questions designed to allow data clean-up and a more accurate estimate of spending by visitors. First, there were a number of visitors who indicated some spending but also that it was paid by the CWG. Those amounts were eliminated from the calculations to avoid double counting, as spending by the Host Society is already included in the analysis of operations spending.

Second, many visitors indicated that they did not know how much they had spent. For these, we imputed a certain amount based on averages for those who did respond. Each spending category was treated differently; see the discussion immediately below. For accommodation costs, restaurant, and air travel, we also split the amount between spending in the Yukon and spending in the rest of Canada.

Accommodation

If the respondent indicated that accommodations were paid for by the CWG Host Society, these amounts were excluded except for those who indicated they spent some nights outside the Yukon. The spending on accommodation for the latter was assigned to outside the Yukon. Respondents who indicated they paid for their own accommodation but who did not know how much had their accommodation spending imputed at \$100 per night. (Exactly \$100.00 was the median value of spending on accommodation per night, while the mean was \$112.57). We used the median rather than the average because there seemed to be a number of outliers that pulled up the average. We ensured that anyone who stayed in the Athlete's Village did not have any amount for accommodation costs in the Yukon included in the numbers.

Restaurants

Restaurant meal costs were also divided into Yukon and non-Yukon spending if the respondent indicated that they had spent some nights outside the Yukon. Missing values were replaced by an imputed \$25.00

per person per night. The survey results indicated that the average spending on restaurant meals was \$25.86 and the median was \$21.08 for those who said they paid for their own meals.

Shopping, tickets, entertainment, vehicle costs

These amounts were relatively small and we simply set the amount equal to zero if it was missing in accordance with our principle of prudent estimates. All shopping, tickets, entertainment and vehicle costs were allocated to the Yukon.

Airfare

Half of the airfare costs were allocated to the Yukon and the other half to the rest of Canada. For athletes and coaches, the amount was set to zero to avoid double counting as the spending through MKI Travel (the agency that arranged the athlete travel) is covered elsewhere. For those who paid their own airfare and stated they did not know the amount, an amount was imputed based on the average airfare paid by respondents from their province or territory of origin.

Our rationale for allocating half the airfare costs to the Yukon economy is as follows. About half of the purchased inputs (fuel, catering, etc.) are purchased in the Yukon. For the value-added portion (i.e. wages, profits) of the expenditure, in a “domestic” (as opposed to “national”) economic accounts framework, the residence of the income earners is irrelevant, economic activity gets counted where it takes place, not where the income earners reside. So we argue that half the salaries & profit related to those flights should go to the Yukon GDP.

3 Size and scope of the event

For a jurisdiction as small as the Yukon, hosting the 2007 Canada Winter Games was a relatively large undertaking. Planning and preparing for the Games took more than five years. The Games had:

- 13 teams totalling 2,654 athletes competing in 22 sports;
- nearly 1,500 coaches, managers, officials, and artists;
- 1,750 media, mission staff, and VIPs;
- an athletes' village that served 210,000 meals over the course of the Games; and,
- approximately 1,700 additional other visitors to the Yukon.

Capital spending required to prepare infrastructure for the Games totalled \$69.1 million from 2003 through to 2007, with the Canada Games Centre and the Athletes' Village making up the bulk of that figure.

Operations spending from 2003 to 2007 totalled \$27.7 million, including \$12.6 million for Yukon goods and services and \$4.4 million in salaries and benefits for the 100 full-time equivalent positions created by the Host Society's operational needs.

Finally, nearly 4,000 volunteers — 15% of the Yukon's population aged 15 and up — worked on the Games.

3.1 *Presentation and discussion of data on capital spending*

Table 2 below summarizes the capital costs of building the infrastructure needed to host the 2007 Canada Winter Games in Whitehorse.

Table 2 Capital expenditures: 2003 to 2007

<i>Year</i>	<i>Canada Games Centre</i>	<i>Athletes' Village</i>	<i>Other Projects</i>	<i>Total</i>
2003	1,800,000	0	530,000	2,340,000
2004	18,000,000	50,000	0	18,050,000
2005	12,080,000	9,100,000	100,000	21,280,000
2006	1,210,000	16,780,000	870,000	18,850,000
2007	30,000	8,510,000	20,000	8,560,000
Total	33,120,000	34,440,000	1,520,000	\$69,080,000

Note: Expenditures are rounded to the nearest \$10,000.

The "Other Projects" list includes the renovation of the heritage fire hall on First Avenue, the construction of the ski chalet at Mt. Sima, and the construction of the long-track speed skating oval.

Capital expenditures were funded by the federal government, the territorial government, and the City Whitehorse with the Canada Winter Games Host Society also being listed as a funding partner for the Athletes' Village. Overall, the Yukon government provided approximately 50% of the capital funding, the federal government 35% and the City the remaining 15%. However, the sources of funding do not affect our calculations of economic impact. All of the expenditures shown in Table 2 are a direct result of the hosting the Games.

3.2 Presentation and discussion of data on operations spending

As with the capital spending necessary for Whitehorse to host the Games, the resources required to organise, manage, and operate the Games were significant in the Yukon economic context.

3.2.1 Host Society staff, salaries and wages

The 2007 Canada Winter Games Host Society began directly employing staff in a very small way late in 2003 and then ramping up the number of positions and total payroll as shown in Table 3 below. During the 2-week period of the Games themselves, the Society had between 110 and 115 employees. It is our understanding that the wages and benefits of the large number of temporary employees hired in 2007 were considerably lower, on average, than the administrative positions in the Society. This helps explain the apparent discrepancy in Table 3 where the number of full-time equivalent positions in 2007 falls only slightly from 2006 but the total salaries and benefits number falls dramatically.

**Table 3 CWG Host Society payroll &
Yukon government secondments: 2003 to 2007**

<i>Year</i>	<i>Full-time equivalent positions</i>	<i>Total salaries & benefits</i>
2003	—	1,000
2004	4.5	295,000
2005	14.0	1,020,000
2006	44.0	2,194,000
2007	38.0	939,000
Total	100.5	\$4,450,000

In addition to the staff positions paid through the Host Society payroll, Table 3 includes some staff seconded from the territorial government to work full-time on the overall effort of hosting the Games. These positions (approximately four full-time equivalent positions in 2005 and 2006 and one each in 2004 and 2007) were paid through the Yukon government payroll.

3.2.2 Operations spending on goods and services

Overall operations spending, excluding wages and salaries detailed in Section 3.2.1 above, are shown in Table 4 below. Table 4 shows that approximately 54% of operations spending occurred in the Yukon, while less than 0.5% was spent outside of Canada, mostly in the USA. Total spending by the Host Society on goods and services was \$23.3 million. Adding the \$4.4 million on wages and salaries detailed above sums to a grand total of \$27.7 million.

Table 4 CWG Host Society operations spending on goods and services: 2003 to 2007

	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>Total</i>
Canada		178,000	717,000	2,008,000	7,696,000	10,598,000
International		24,000	9,000	45,000	29,000	107,000
Yukon	84,000	1,022,000	1,427,000	2,775,000	7,278,000	12,586,000
Total*	84,000	1,224,000	2,153,000	4,828,000	15,002,000	\$23,292,000

Note: Expenditures are rounded to the nearest \$1,000. Totals may not add up due to rounding.

A detailed breakdown of spending by industry classification and year can be found in Table 20 and Table 21 in Appendix 5.1 below. Table 22 presents a breakdown of overall operations spending by province and territory in Canada.

3.3 Presentation and discussion of data on visitors

3.3.1 Number of visitors

Section 2.3.2 above presents the methodology used to arrive at the number of visitors from outside the Yukon. Based on that methodology, we estimate that a total of about 7,600 visitors came to Whitehorse for the Games. About 860 visitors also went to other Yukon communities; the places mentioned include Carcross, the Takhini Hot Springs, Haines Junction, Skagway, Dawson City and Watson Lake. However, the community numbers are too small to provide statistically valid estimates.

Table 5 Estimated number of visitors

	<i>Anticipated before the Games</i>	<i>Estimated after the Games</i>
An athlete in the Games	2,700	2,654
A coach, trainer or manager, official, judge	1,450	1,244
Other volunteer/support/performer		249
Chef de mission/Provincial delegation/Media	1,000	1,744
A parent/guardian/friend or sibling of an athlete	3,500	1,449
Spectator/Outside visitor		251
Total	8,650	7,591

Note: The total of 7,591 shown is lower than the overall estimate of 7,599 in Table 1 because of rounding

As Table 6 shows, Ontario provided the largest contingent of visitors, followed by the three westernmost provinces. Nova Scotia and Newfoundland also sent a considerable number of people, especially considering their distance from the Yukon.

Table 6 Origin of visitors interviewed

<i>Origin</i>	<i>Survey estimate</i>	<i>Confidence interval</i>
Ontario	1,050	±176
BC	1,005	±171
Alberta	819	±152
Saskatchewan	808	±145
Nova Scotia	650	±132
Newfoundland	630	±133
Quebec	569	±132
NWT	572	±128
Manitoba	503	±123
PEI	371	±107
Nunavut	221	±89
United States	217	±93
New Brunswick	44	±30
Overseas	26	±26
Refused/Blank	107	±60

Almost all visitors came by air. People who drove accounted for a little more than 1%, visitors who came by bus for less than 1% and visitors who flew to Whitehorse accounted for about 98% of the total.

3.3.2 Visitor spending

Table 7 shows that total direct spending by visitors during the Games amounted to an estimate of \$9.3 million. For a survey this size, the actual amount would be between \$8.2 million and \$10.3 million 19 times out of twenty (95% confidence). Accommodation costs were the largest expense, followed by airfares. (Note that half the cost of airfares was allocated to the Yukon.) Yukon retailers gained an estimated \$900,000 in sales during the Games from Outside visitors, while restaurants sold \$1.6 million worth of food.

Table 7 Estimated visitor spending by type of spending within the Yukon

	<i>Estimate</i>	<i>95% confidence interval</i>	
		<i>Lower bound</i>	<i>Upper Bound</i>
Accommodation	\$2,530,000	\$2,070,000	\$2,980,000
Restaurants	\$1,640,000	\$1,480,000	\$1,790,000
CWG Tickets	\$300,000	\$260,000	\$340,000
Entertainment	\$300,000	\$250,000	\$360,000
CWG Merchandise	\$810,000	\$740,000	\$880,000
Other shopping	\$900,000	\$750,000	\$1,050,000
Vehicle spending	\$870,000	\$460,000	\$1,280,000
Airfare	\$1,940,000	\$1,700,000	\$2,170,000
Total	\$9,290,000	\$8,250,000	\$10,300,000

Spending outside of the Yukon was considerably less at an estimated \$2.19 million and was mostly for airfare, as Table 8 shows.

Table 8 Estimated visitor spending by type of spending in the rest of Canada

	<i>Estimate</i>	<i>95% confidence interval</i>	
		<i>Lower bound</i>	<i>Upper Bound</i>
Accommodation	\$190,000	\$140,000	\$230,000
Restaurants	\$70,000	\$50,000	\$80,000
Airfare	\$1,940,000	\$1,700,000	\$2,170,000
Total	\$2,190,000	\$1,940,000	\$2,440,000

Parents, friends and siblings of athletes were the biggest spenders both as a total and per visitor party, while athletes spent very little. Table 9 also shows that Chef de mission, provincial delegates and media were largest per person spenders.

Table 9 Total and per person spending by type of visitor

	<i>Total spending</i>	<i>Spending per party</i>	<i>Spending per person</i>
Athlete	\$250,000	\$90.00	\$90.00
A parent/guardian/friend or sibling of an athlete	\$3,990,000	\$2,750.00	\$1,540.00
A coach, trainer or manager, official, judge	\$770,000	\$620.00	\$580.00
Chef de mission/Provincial delegation/Media	\$3,480,000	\$2,000.00	\$1,850.00
Spectator/Outside visitor	\$360,000	\$1,450.00	\$970.00
Other volunteer/support/performer	\$440,000	\$1,790.00	\$1,500.00
Total or Average	\$9,290,000	\$1,220.00	\$1,000.00

3.3.3 Visits before the Games

The survey instruments asked respondents if they had come to the Yukon for a related Canada Winter Games activity before the Games began and how many nights they spent here. Using this information we estimated how much they spent on those previous trips based on the assumptions described in Section 2.3.3 above (\$100/night for accommodation, \$25/day for restaurants and airfare based on the average for visitors from their province). Individuals who came to the Yukon for a Games-related activity before the Games spent an estimated \$1.06 million dollars. However, we do not include these numbers in our economic impact analysis to avoid double counting as there is no way of knowing whether those expenses were paid by the CWG Host Society.

Table 10 Estimated spending for visitors who came before the Games

	<i>Estimate</i>	<i>95% confidence interval</i>	
		<i>Lower bound</i>	<i>Upper Bound</i>
Accommodation	\$510,000	\$400,000	\$610,000
Restaurants	\$130,000	\$100,000	\$150,000
Airfare	\$420,000	\$400,000	\$450,000
Total	\$1,060,000	\$920,000	\$1,190,000

3.4 Volunteers

Volunteers played a very large and crucial role in making the Games happen. Indeed, the ability of a small-population jurisdiction such as the Yukon to find enough volunteers was a concern in allowing the territory to host the 2007 Canada Winter Games. This concern was misplaced as can be seen in the volunteer numbers shown in Table 11 below. The population of the Yukon in December 2006 was 32,335, and that the population aged 15 years and up was 26,518. Therefore, more than 18% of Yukoners aged 15 and over made the effort to volunteer for the Games, while nearly 15% were assigned specific duties. The total assigned volunteer figure is likely an undercount given that some volunteers did work prior to the Games and others did valuable work but were not included in the database because they were under the age of 13 years, the official cut-off for Games' volunteers.

Table 11 Volunteer numbers

	Number	% of Yukon population aged 15+
Original volunteers (approximate)	4,828	18.2%
Dropped from database as unable to volunteer (approximate)	500	
Total on database	4,328	16.3%
Declined or otherwise not assigned	439	
Total assigned volunteers	3,889	14.7%

In total, the 3,889 assigned volunteers filled 5,201 positions, with many obviously filling multiple positions. We do not have any data on the number of volunteer hours worked; however, most volunteers put in full time days during the two weeks of the Games.

4 Economic impacts

4.1 Methodology

Statistics Canada's 2003 Input-Output model provides the multipliers we need to calculate the impacts of spending in different economic sectors and industries on the Yukon's economy. The model provides different levels of detail by sector or industry but at the more detailed levels, multipliers for many industries are suppressed to protect confidentiality for the few firms in that industry. The suppression of multipliers for direct impacts is particularly common for this reason. For our calculation of direct impacts, therefore, we are using the most highly aggregated version of the model (S-Level) which allows us to present direct impacts separately although only for 17 quite broad economic sectors.

In Section 4.3, where we provide the combined direct and indirect impacts, we are able to use the least aggregated version of the model (W-Level) that provides the greatest level of detail by industry sector. However, even this level of the I-O model required that we aggregate some of our data on operations spending where the data provided by the Host Society was highly detailed.

4.2 Direct impacts

As noted in the introduction, direct impacts are the value-added increase in employment, local incomes, and local GDP retained in the area, and tax receipts to all governments created directly by spending on the project. Table 12 below summarizes all of the economic injections attributable to the 2007 Canada Winter Games into the Yukon's economy through capital spending, operations spending and spending by visitors.

Notes on how the figures in Table 12 were arrived at:

- All capital spending was included in the construction sector.
- We originally coded all operations spending at the four-digit level of the North American Industry Classification System or NAICS. To fit the S-Level aggregation of the I-O model we simply aggregated the spending into the appropriate two-digit level to match the model for direct impacts.
- It is critical to note that the Host Society employment and payroll (along with the Yukon government's secondments) as shown in Table 3 in Section 3.2.1 above has been included as a separate, stand-alone economic injection in Table 12. The payroll is not an injection into a particular industry that then needs to be put through a multiplier analysis in order to determine its economic impact. It is not the same, for example, as buying services from a firm that will allocate a proportion of its revenues to rent, inputs, payroll etc. Instead, we are treating the entire direct employment and payroll entirely as a direct impact and it will appear in the impacts on GDP, employment, and incomes in Table 13 below.
- We have chosen not to include the sales of CWG tickets and passes, whether to visitors or residents, as an injection as the value of those sales would have already been captured in the operations spending of the Host Society and we wish to avoid double-counting.
- To avoid double-counting on CWG merchandise sales (part of the value of which is included in the Host Society operations spending for the share of merchandise bought through Yukon suppliers) we have assumed a retail margin of 50% on sales and have included that as an economic injection rather than the full amount of the sales.
- The survey on visitor spending categorised spending fairly broadly (it is difficult for people to be too specific) but those categories were designed to fit well into the economic sectors used here. While there may be some incorrect categorizations — e.g. people identifying their bar bills as entertainment, for example, will result in that spending being placed in the Arts, Entertainment & Recreation sector rather than the Accommodation & Food Services sector where it belongs — these will have only a marginal of effect on the impact calculations.

Table 12 Total CWG economic injections into the Yukon by broad economic sector: 2003-2007

<i>Economic Sector</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>Grand Total</i>
Accommodation and Food Services	20,000	18,000	42,000	57,000	5,325,000	5,462,000
Administrative and Support Services	-	40,000	79,000	26,000	202,000	347,000
Arts, Entertainment and Recreation	-	70,000	74,000	489,000	744,000	1,378,000
Construction*	2,350,000	18,566,000	21,537,000	19,333,000	9,063,000	70,849,000
Educational Services	4,000	2,000	3,000	54,000	781,000	843,000
Finance, Insurance, Real Estate and Rental and Leasing	-	1,000	237,000	540,000	1,394,000	2,174,000
Government Sector	-	14,000	19,000	80,000	33,000	147,000
Health Care and Social Assistance	-	-	-	1,000	2,000	3,000
Information and Cultural Industries	5,000	14,000	10,000	39,000	1,006,000	1,073,000
Manufacturing	-	14,000	75,000	135,000	202,000	426,000
Mining and Oil and Gas Extraction	-	-	32,000	17,000	2,000	51,000
Other Services (Except Public Administration)	-	2,000	25,000	78,000	29,000	135,000
Professional, Scientific and Technical Services	24,000	258,000	433,000	213,000	512,000	1,441,000
Retail Trade	2,000	22,000	25,000	346,000	2,170,000	2,566,000
Transportation and Warehousing	18,000	38,000	85,000	148,000	2,614,000	2,903,000
Utilities	-	3,000	9,000	15,000	116,000	143,000
Wholesale Trade	-	5,000	20,000	58,000	328,000	412,000
CWG salaries & benefits	1,000	295,000	1,020,000	2,194,000	939,000	4,450,000
Grand Total	2,424,000	19,363,000	23,727,000	23,823,000	25,464,000	94,802,000

Note: *The construction figure includes both the capital spending by the territorial and municipal governments as well as spending and in-kind contributions by the CWG Host Society, hence it is larger than the numbers presented in Table 2 above.

The economic injections detailed in Table 12 provide the basis for the multiplier analysis used to calculate the direct economic impacts shown in Table 13 below.

Table 13 Canada Winter Games direct economic impacts on the Yukon: 2003 to 2007

<i>Economic Sector</i>	<i>Total Economic Injection 2003 to 2007</i>	<i>GDP</i>	<i>Employment (person- years)</i>	<i>Total incomes</i>	<i>Indirect taxes on products</i>	<i>Indirect taxes on production</i>
Accommodation and Food Services	5,462,000	2,908,000	88.9	2,039,000	185,000	113,000
Administrative and Support Services	347,000	195,000	6.4	163,000	1,000	2,000
Arts, Entertainment and Recreation	1,378,000	675,000	48.9	530,000	16,000	19,000
Construction	70,849,000	21,243,000	451.2	15,000,000	252,000	280,000
Educational Services	843,000	436,000	39.7	448,000	-	7,000
Finance, Insurance, Real Estate and Rental and Leasing	2,174,000	1,663,000	1.9	714,000	14,000	135,000
Government Sector	147,000	99,000	1.0	77,000	-	1,000
Health Care and Social Assistance	3,000	2,000	0.1	2,000	-	-
Information and Cultural Industries	1,073,000	785,000	8.7	438,000	1,000	12,000
Manufacturing	426,000	200,000	7.3	164,000	-	2,000
Mining and Oil and Gas Extraction	51,000	33,000	0.1	5,000	-	-
Other Services (Except Public Administration)	135,000	82,000	2.2	65,000	-	3,000
Professional, Scientific and Technical Services	1,441,000	744,000	17.0	556,000	2,000	8,000
Retail Trade	2,566,000	1,439,000	39.7	1,086,000	11,000	16,000
Transportation and Warehousing	2,903,000	1,192,000	22.3	984,000	63,000	54,000
Utilities	143,000	94,000	0.5	29,000	4,000	2,000
Wholesale Trade	412,000	210,000	2.0	97,000	4,000	3,000
CWG salaries & benefits	4,450,000	4,450,000	100.5	4,450,000	-	-
Grand Total	94,802,000	36,451,000	838.3	26,844,000	554,000	657,000

Notes:

Total incomes includes wages, salaries, supplementary labour income and mixed income.

Indirect taxes on products include the GST plus excise taxes and fuel taxes

Indirect taxes on production include municipal property taxes, capital taxes and assorted Yukon government fees.

GDP, employment, and incomes include the direct employment and payroll of the Host Society plus the payroll and FTEs of Yukon government secondments to work on the Game that were paid directly by government.

The direct economic impact of the 2007 Canada Winter Games on the Yukon between 2003 and 2007 included a boost of \$36.5 million in GDP, nearly 840 person-years of employment, an increase in incomes of \$26.8 million and an increase in indirect taxes of approximately \$1.2 million.

4.2.1 Volunteers

What is the economic impact of volunteers? Obviously, the number of volunteers and the work they did made the Games possible, and, for most, volunteering gave them rewards in the form of satisfaction in a job well done and in a stronger sense of community and commitment. But in an economic impact assessment we are always faced with the need to express the impacts in dollars and cents. To determine the economic impact of the volunteers we use the following logic:

- Volunteers who did not receive any form of pay for their time (but also did not suffer any economic loss) have no economic impact. Examples would include the self-employed who simply delayed their paid work, or teachers who were not paid for the extra-long spring break but whose school year was extended later into the summer.
- Some volunteers were paid in some way for their time volunteering. The Yukon government, the City, and several large employers in Whitehorse such as NorthwesterTel and Yukon Electric had various programs in place that allowed employees to take paid leave to work as volunteers. Some of that leave was in addition to what the employees would be due in any case to provide a greater incentive for people to volunteer. Therefore, the value of the additional paid leave could logically be counted as an economic impact attributable to the Games. And this additional paid leave was significant. For example, the Yukon government provided \$967,000 worth of such leave to its employees over the course of the Games.
- However, we do not have data on the value of the paid leave provided by all of the employers of volunteers. Further, given that volunteers were not replaced while they were with the Games, there is an argument to be made that some of their regular work simply did not get done, or was made up later but only at the cost of overtime for example. These costs would need to be balanced against the value of the additional paid leave to arrive at a net economic impact.
- Therefore, given our objective of erring on the side of prudence in determining economic impacts for the Games, we are not including any dollar value for volunteers as part of the economic impact of the Games.

4.3 Direct and indirect impacts

Indirect economic impacts are the value-added increase in employment, local incomes and local GDP retained in the area, and tax receipts to all governments from local suppliers of goods and services to the project. As with Table 12 in the section on direct impacts above, Table 14 summarizes all of the economic injections attributable to the 2007 Canada Winter Games into the Yukon's economy through capital spending, operations spending and spending by visitors — only here the injections are broken out in greater detail by industry and are the basis for calculating the combined direct and indirect economic impacts of the 20078 Canada Winter Games on the Yukon.

Due to the inherent limitations of Statistics Canada's Inter-Provincial Input Output model, we are not able to provide separate figures for indirect impacts. Instead, the model allows us to calculate combined direct and indirect impacts for economic injections into various industries. The breakdown in industries used in Table 14 below is dictated by what multipliers are available in the input-output model.

Notes on how the figures in Table 14 were arrived at:

- All capital spending on infrastructure (figures in Table 2) was included in the non-residential building construction industry.
- We originally coded all operations spending at the four-digit level of the North American Industry Classification System or NAICS. To fit the W-Level aggregation of the I-O model used here we aggregated the spending into the appropriate level to match the model.
- In coding Yukon firms, we were often required to make judgement calls on what the firm's major type of business was. For example, if a local clothing retailer acted as the wholesale supplier to the Host Society, that spending was coded as *Retail Trade* rather than *Wholesale Trade*.
- As with the direct impacts Table 12 above, the Host Society employment and payroll (along with the Yukon government's secondments) has been included as a separate, stand-alone economic injection in Table 14. The payroll is not an injection into a particular industry that then needs to be put through a multiplier analysis in order to determine its economic impact. It is not the same, for example, as buying services from a firm that will allocate a proportion of its revenues to rent, inputs, payroll etc. Instead, we are treating the entire direct employment and payroll entirely as a direct impact.

- As above, we have chosen not to include the sales of CWG tickets and passes, whether to visitors or residents, as an injection as the value of those sales would have already been captured in the operations spending of the Host Society and we wish to avoid double-counting.
- And again, to avoid double-counting on CWG merchandise sales (part of the value of which is included in the Host Society operations spending for the share of merchandise bought through Yukon suppliers) we have assumed a retail margin of 50% on sales and have included that as an economic injection rather than the full amount of the sales.
- Visitor spending in Table 14 falls under *Air Transportation, Amusement and Recreation Industries, Automotive Equipment Rental and Leasing, Food Services and Drinking Places, Retail Trade, and Traveller Accommodation*.
- Honorariums were categorized as injections to households. However, payments made to artists and performers for their professional work were largely placed in the *Performing Arts, Spectator Sports and Related Industries* category.

Table 14 Total CWG economic injections into the Yukon by industry: 2003-2007

<i>Industry</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>Grand Total</i>
Advertising and Related Services	23,000	-	11,000	91,000	105,000	231,000
Air Transportation	18,000	31,000	38,000	19,000	2,128,000	2,234,000
All Other Transit and Ground Passenger Transportation	-	-	-	5,000	271,000	277,000
All Other Wood Product Manufacturing	-	-	-	1,000	8,000	9,000
Amusement and Recreation Industries	-	70,000	73,000	142,000	458,000	743,000
Architectural, Engineering and Related Services	1,000	101,000	103,000	69,000	176,000	450,000
Automotive Equipment Rental and Leasing	-	-	4,000	7,000	1,098,000	1,109,000
Automotive Repair and Maintenance	-	-	-	10,000	9,000	19,000
Bread and Bakery Product Manufacturing	-	-	-	2,000	10,000	13,000
Coffee and Tea Manufacturing	-	-	-	2,000	38,000	40,000
Computer Systems Design and Related Services	-	-	50,000	7,000	15,000	73,000
Electric Power Generation, Transmission and Distribution	-	3,000	9,000	15,000	116,000	143,000
Food Services and Drinking Places	19,000	10,000	20,000	30,000	1,992,000	2,070,000
Government Community Colleges	-	-	1,000	51,000	765,000	817,000
Government Elementary and Secondary Schools	-	-	-	-	3,000	3,000

<i>Industry</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>Grand Total</i>
Grant-Making, Civic, and Professional and Similar Organizations	-	1,000	25,000	39,000	12,000	77,000
Insurance Carriers	-	1,000	1,000	85,000	27,000	113,000
Internet Service Providers, Web Search Portals	-	6,000	1,000	-	-	7,000
Investigation and Security Services	-	-	14,000	-	8,000	22,000
Jewellery, Silverware and All Other Miscellaneous Manufacturing	-	-	8,000	33,000	49,000	90,000
Legal, Accounting, Tax Preparation, Bookkeeping and Payroll Services	-	4,000	-	-	30,000	34,000
Lessors of Real Estate	-	-	-	3,000	8,000	11,000
Machine Shops	-	10,000	56,000	70,000	19,000	155,000
Miscellaneous Plastic Product Manufacturing	-	-	5,000	-	-	5,000
Motion Picture and Video Production	-	-	-	1,000	10,000	10,000
Newspaper, Periodical, Book and Directory Publishers	-	7,000	8,000	34,000	241,000	291,000
Non-residential Building Construction	2,350,000	18,075,000	21,315,000	19,167,000	8,921,000	69,829,000
Other Federal Government Services	-	-	-	10,000	-	10,000
Other Municipal Government Services	-	5,000	-	-	-	5,000
Other Professional, Scientific and Technical Services	-	153,000	269,000	46,000	299,000	766,000
Other Provincial and Territorial Government Services	-	9,000	19,000	70,000	33,000	132,000
Other Schools, Instruction and Educational Support Services	4,000	2,000	1,000	3,000	13,000	23,000
Performing Arts, Spectator Sports and Related Industries	-	-	2,000	347,000	286,000	635,000
Personal Care Services and Other Personal Services	-	-	-	1,000	3,000	4,000
Postal Service and Couriers and Messengers	-	1,000	1,000	8,000	7,000	16,000
Printing	-	3,000	4,000	27,000	78,000	112,000

<i>Industry</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>Grand Total</i>
Private Households	-	-	-	1,000	5,000	7,000
Radio and Television Broadcasting	-	-	-	3,000	146,000	150,000
Rental and Leasing (except Automotive Equipment)	-	-	232,000	445,000	262,000	940,000
Repair and Maintenance (except Automotive Repair and Maintenance)	-	-	-	28,000	2,000	31,000
Retail Trade	2,000	22,000	25,000	346,000	2,170,000	2,566,000
Services to Buildings and Dwellings	-	40,000	65,000	25,000	78,000	208,000
Sound Recording Industries	-	-	-	-	5,000	5,000
Support Activities for Mining and Oil and Gas Extraction	-	-	32,000	17,000	2,000	51,000
Support Activities for Transportation	-	-	-	1,000	-	1,000
Telecommunications	5,000	1,000	1,000	-	604,000	610,000
Transportation Engineering Construction	-	492,000	222,000	165,000	142,000	1,021,000
Travel Arrangement and Reservation Services	-	-	-	-	4,000	4,000
Traveller Accommodation	2,000	8,000	24,000	27,000	3,333,000	3,394,000
Truck Transportation	-	7,000	46,000	114,000	205,000	372,000
Urban Transit Systems	-	-	-	-	2,000	2,000
Warehousing and Storage	-	-	-	-	1,000	1,000
Wholesale Trade	-	5,000	20,000	58,000	328,000	411,000
CWG salaries & benefits	1,000	295,000	1,020,000	2,194,000	939,000	4,450,000
Grand Total	2,424,000	19,363,000	23,727,000	23,823,000	25,464,000	94,802,000

The economic injections detailed in Table 14 provide the basis for the multiplier analysis used to calculate the direct economic impacts shown in Table 15 below.

Table 15 Canada Winter Games direct and indirect economic impacts on the Yukon: 2003 to 2007

<i>Industry</i>	<i>Total Economic Injection 2003 to 2007</i>	<i>GDP</i>	<i>Employment (person- years)</i>	<i>Total incomes</i>	<i>Indirect taxes on products</i>	<i>Indirect taxes on production</i>
Advertising and Related Services	231,000	170,940	4.3	127,050	-	2,310
Air Transportation	2,234,000	1,094,660	17.0	781,900	44,680	44,680
All Other Transit and Ground Passenger Transportation	277,000	213,290	3.7	188,360	8,310	5,540
All Other Wood Product Manufacturing	9,000	6,660	0.1	1,080	-	540
Amusement and Recreation Industries	743,000	356,640	169.2	579,540	-	-
Architectural, Engineering and Related Services	450,000	310,500	10.2	202,500	9,000	13,500
Automotive Equipment Rental and Leasing	1,109,000	643,220	10.1	487,960	-	11,090
Automotive Repair and Maintenance	19,000	12,920	0.1	4,750	570	190
Bread and Bakery Product Manufacturing	13,000	11,310	0.3	8,450	130	390
Coffee and Tea Manufacturing	40,000	24,400	1.3	21,600	-	400
Computer Systems Design and Related Services	73,000	35,770	1.3	31,390	-	-
Electric Power Generation, Transmission and Distribution	143,000	143,000	0.0	-	-	-
Food Services and Drinking Places	2,070,000	1,469,700	8.6	496,800	62,100	20,700
Government Community Colleges	817,000	506,540	17.0	367,650	40,850	16,340
Government Elementary and Secondary Schools	3,000	2,580	0.0	1,830	30	-
Grant-Making, Civic, and Professional and Similar Organizations	77,000	70,840	0.9	66,220	-	-
Heritage Institutions	-	-	0.0	-	-	-
Insurance Carriers	113,000	82,490	22.1	70,060	-	1,130
Internet Service Providers, Web Search Portals	7,000	5,110	0.0	2,450	140	420
Investigation and Security Services	22,000	12,760	0.2	10,780	-	220
Jewellery, Silverware and All Other Miscellaneous Manufacturing	90,000	45,000	0.9	32,400	900	900

<i>Industry</i>	<i>Total Economic Injection 2003 to 2007</i>	<i>GDP</i>	<i>Employment (person- years)</i>	<i>Total incomes</i>	<i>Indirect taxes on products</i>	<i>Indirect taxes on production</i>
Legal, Accounting, Tax Preparation, Bookkeeping and Payroll Services	34,000	16,660	1.7	13,600	-	340
Lessors of Real Estate	11,000	7,920	0.2	6,050	-	110
Machine Shops	155,000	111,600	0.7	41,850	3,100	9,300
Miscellaneous Plastic Product Manufacturing	5,000	3,600	0.1	3,300	50	100
Motion Picture and Video Production	10,000	6,000	0.2	5,200	-	100
Newspaper, Periodical, Book and Directory Publishers	291,000	157,140	57.1	128,040	-	2,910
Non-Depository Credit Intermediation	-	-	0.0	-	-	-
Non-residential Building Construction	69,829,000	41,897,400	527.2	25,138,440	1,396,580	698,290
Other Federal Government Services	10,000	3,900	0.1	3,100	-	100
Other Municipal Government Services	5,000	4,050	0.0	2,750	-	50
Other Professional, Scientific and Technical Services	766,000	612,800	8.5	360,020	7,660	-
Other Provincial and Territorial Government Services	132,000	92,400	2.2	63,360	-	1,320
Other Schools, Instruction and Educational Support Services	23,000	18,170	0.2	13,570	-	230
Performing Arts, Spectator Sports and Related Industries	635,000	393,700	31.1	381,000	-	6,350
Personal Care Services and Other Personal Services	4,000	2,400	0.2	1,880	40	40
Postal Service and Couriers and Messengers	16,000	10,880	0.2	7,520	-	640
Printing	112,000	63,840	3.3	124,320	2,240	2,240
Private Households	7,000	4,200	0.1	3,150	-	-
Radio and Television Broadcasting	150,000	150,000	3.7	150,000	-	-
Rental and Leasing (except Automotive Equipment)	940,000	592,200	21.2	1,193,800	-	9,400

<i>Industry</i>	<i>Total Economic Injection 2003 to 2007</i>	<i>GDP</i>	<i>Employment (person- years)</i>	<i>Total incomes</i>	<i>Indirect taxes on products</i>	<i>Indirect taxes on production</i>
Repair and Maintenance (except Automotive Repair and Maintenance)	31,000	19,220	0.2	8,680	310	310
Retail Trade	2,566,000	1,642,240	24.3	949,420	51,320	51,320
Services to Buildings and Dwellings	208,000	151,840	3.7	108,160	2,080	2,080
Sound Recording Industries	5,000	4,300	0.2	3,900	50	50
Support Activities for Mining and Oil and Gas Extraction	51,000	21,930	0.7	12,240	-	3,570
Support Activities for Transportation	1,000	610	0.0	420	10	10
Telecommunications	610,000	451,400	12.8	384,300	12,200	12,200
Transportation Engineering Construction	1,021,000	878,060	7.9	500,290	-	10,210
Travel Arrangement and Reservation Services	4,000	1,520	0.0	1,120	40	-
Traveller Accommodation	3,394,000	2,681,260	81.9	1,968,520	-	33,940
Truck Transportation	372,000	260,400	6.3	167,400	11,160	11,160
Urban Transit Systems	2,000	1,420	0.0	940	80	40
Warehousing and Storage	1,000	600	0.0	1,920	50	10
Wholesale Trade	411,000	279,480	3.0	139,740	4,110	4,110
CWG salaries & benefits	4,450,000	4,450,000	100.5	4,450,000	-	-
Grand Total	94,802,000	60,211,470	1,167.4	39,820,770	1,657,790	978,880

Notes:

Total incomes includes wages, salaries, supplementary labour income and mixed income.

Indirect taxes on products include the GST plus excise taxes and fuel taxes

Indirect taxes on production include municipal property taxes, capital taxes and assorted Yukon government fees.

GDP, employment, and incomes include the direct employment and payroll of the Host Society plus the payroll and FTEs of Yukon government secondments to work on the Game that were paid directly by government.

The direct plus indirect economic impact of the 2007 Canada Winter Games on the Yukon between 2003 and 2007 included a boost of \$60.2 million in GDP, 1,167 person-years of employment, an increase in incomes of \$39.8 million and an increase in indirect taxes of approximately \$2.6 million.

4.4 Discussion of induced impacts and income tax impacts

Induced impacts are the increase in employment, local incomes, local GDP, and tax receipts from the spending and re-spending of all labour income generated by the original expenditure. As noted in the introduction, the Inter-Provincial Input-Output model no longer includes the multipliers needed to

calculate induced impacts and they are therefore not quantified here. This does not mean, however, that induced impacts are not both real and likely quite significant. The direct and indirect impact of the 2007 Canada Winter Games on Yukon incomes was an increase of approximately \$39.8 million over the 2003 to 2007 period. The spending of that increase in incomes would obviously have an impact on the Yukon in turn.

As with induced impacts, we lack a sufficiently rigorous means of estimating the impact of the Canada Winter Games on income taxes collected in the Yukon. However, if all of the \$39.8 million increase in incomes were taxed at the lowest marginal rates (15.0% federally and 7.04% territorially) the impact on income tax revenues for the 2003 to 2007 period would be \$5.97 million at the federal level and \$2.80 million at the territorial level.

4.5 Ancillary impacts

Ancillary impacts are potential economic impacts that are likely to happen in the future as a result of the Games, but are not directly measurable today. For many people, the Games “put Whitehorse on the map”. They believe that the Games and the media coverage surrounding them will result in future economic impacts in the form of increased tourism. As well, a large amount of infrastructure was built because of the Games: especially the hockey and indoor soccer rinks at the Canada Games Centre, and the Athlete’s Village, which will be turned, in student residences and social housing.

4.5.1 Legacy

It could be argued that most of the infrastructure constructed for the Canada Winter Games probably would have been built in any case: Whitehorse did need new hockey arenas, an indoor soccer pitch, and additional social housing and student residences. However, the Games made it possible for them to be partly funded by the Federal government. The extra federal funding for Games infrastructure allowed the Yukon government and the City of Whitehorse to spend on other things rather than replacement arenas, student housing and social housing. So the Games resulted in a net increase in the Yukon’s infrastructure and its overall wealth.

From an economic impact perspective, it can be argued that the increased amount of infrastructure results in future income streams that increase the overall size of the economy. But life-cycle costs for the infrastructure must also be considered. If it has been overbuilt or is underused, excessive operating costs may crowd out other public spending and outweigh future benefits.

4.5.2 Tourism

It has been argued that the national marketing campaign, the presence of national media and the media coverage of the Games has resulted in increased awareness of the Yukon and could result in increased tourism. As well, a number of media representatives took advantage of their presence in the Yukon to develop other product such as human-interest stories, lifestyle, and travel stories. No one can predict what the magnitude of the value of that publicity and increased awareness will be, but it will doubtless have a future economic impact.

As part of the visitor survey, respondents were asked as set of questions about their awareness of the three territories, changes in their interest in visiting the territories and the likelihood to visit in the next three years. Table 16 clearly shows that majority of visitors developed an increased awareness of the Yukon, but the numbers were not as great for the other two territories.

Table 16 Percentage and number of visitors indicating of greatly increased awareness of the three territories*

	<i>Percentage of visitors</i>	<i>Number of visitors</i>	<i>Per cent who already had high awareness</i>
Yukon	68.5%	4,127	12.9%
Northwest Territories	27.9%	2,061	10.4%
Nunavut	26.8%	1,987	8.6%

* The numbers include those who responded "4" or "5" to the question: "Please rate how much the Games may have increased your awareness for each of the three Territories. Use a scale where a "1" means it Did Not Increase your awareness to a "5" meaning the Games Greatly Increased your awareness."

The increased awareness resulted in an increased interest in visiting the three territories as shown in Table 17. Close to seventy percent of visitors indicated a greater desire to visit the Yukon. The percentages were lower for the NWT and Nunavut, but were still substantial at about 44%.

Table 17 Percentage and number of visitors indicating more interest in visiting the three territories*

	<i>Percentage of visitors</i>	<i>Number of visitors</i>	<i>Per cent who already had high level of interest</i>
Yukon	69.5%	5,114	5.5%
Northwest Territories	44.1%	3,209	4.5%
Nunavut	43.7%	3,152	3.9%

* The numbers include those who responded "4" or "5" to the question: "Think about your interest in visiting each of the Territories in the future, because of information you learned from the Games. Use a 1 to 5 scale where "1" means you are Much Less Interested and "5" means you are Much More Interested."

Finally, respondents were asked about the likelihood of visiting each of the three territories in the next two years. Table 18 shows the weighted responses to that question. Assuming that the intentions translate into actual visits, the Yukon can expect 1,900 extra visitors over the next two years. Given an average expenditure of \$90.00 per person per day and an average stay of four day in the Yukon as reported by the 2004 Visitor exit survey, additional total expenditures of close to \$700,000 can be anticipated over the next two years. The numbers are smaller for the other two territories.

Table 18 Percentage and number of visitors indicating a high likelihood of visiting territories within the next two years*

	<i>Percentage of visitors</i>	<i>Number of visitors</i>
Yukon	24.6%	1,888
Northwest Territories	11.8%	848
Nunavut	9.3%	714

* The numbers include those who responded "4" or "5" to the question: "In the next 2 years, how likely are you to visit each of the Territories? A "1" means Not at all Likely to a "5" meaning Extremely Likely to visit."

4.6 Impacts on other provinces and territories

Although the 2007 Canada Winter Games had by far the largest economic impact on the Yukon, other provinces and territories did receive some Games-related spending. Table 19 below lays out the operations spending by the 2007 CWG Host Society in all provinces and territories in Canada outside of the Yukon. That spending totalled \$10.6 million over the 2003 to 2007 period and was for a wide variety of goods and services, including the travel of Games personnel to other parts of Canada.

**Table 19 CWG spending in
rest of Canada: 2003 to 2007**

<i>Location</i>	<i>Amount</i>
Alberta	1,586,000
British Columbia	1,795,700
Manitoba	155,200
New Brunswick	600
Newfoundland	35,600
Nova Scotia	200
Nunavut	28,800
Northwest Territories	312,700
Ontario	6,072,800
Quebec	407,900
Saskatchewan	202,700
Total	\$10,598,400

In addition, from the results of the visitor spending survey conducted during the Games, we estimate that visitors to the Games spent an additional \$2.2 million in other parts of Canada as part of their trip (with approximately \$1.9 million of that being airfares).

Finally, the Host Society spent approximately \$107,000 for goods and services outside of Canada, mostly in the USA.

Because the spending in the rest of Canada and internationally was so small relative to the respective sizes of the economies in question, we have not attempted to do a multiplier analysis to assess the impacts of that spending.

5 Data appendices

5.1 Spending data by industry & year

Table 20 Canada Winter Games operations spending by industry NAICS 4-digit code: 2003 to 2007

	2003	2004	2005	2006	2007	Total
2122 Metal Ore Mining			\$30,418	\$15,939		\$46,357
2131 Support Activities for Mining and Oil and Gas Extraction			\$1,766	\$875	\$2,480	\$5,120
2211 Electric Power Generation, Transmission and Distribution		\$2,997	\$9,182	\$14,129	\$115,873	\$142,181
2213 Water, Sewage and Other Systems			\$190	\$469	\$287	\$946
2362 Non-residential Building Construction	\$10,887	\$28,337	\$10,723	\$159,157	\$43,620	\$252,724
2373 Highway, Street and Bridge Construction		\$491,527	\$222,014	\$165,094	\$142,123	\$1,020,758
2379 Other Heavy and Civil Engineering Construction		\$18,764		\$18,674	\$4,240	\$41,677
2389 Other Specialty Trade Contractors			\$24,705	\$154,335	\$367,797	\$546,837
3116 Meat Product Manufacturing		\$821	\$1,848			\$2,669
3118 Bakeries and Tortilla Manufacturing			\$413	\$2,247	\$10,216	\$12,876
3119 Other Food Manufacturing				\$2,255	\$18,423	\$20,678
3121 Beverage Manufacturing					\$25,000	\$25,000
3152 Cut and Sew Clothing Manufacturing				\$923	\$1,291	\$2,214
3159 Clothing Accessories and Other Clothing Manufacturing		\$205	\$7,739	\$32,366	\$39,532	\$79,843
3219 Other Wood Product Manufacturing				\$695	\$45,075	\$45,770
3231 Printing and Related Support Activities		\$3,046	\$3,873	\$37,218	\$78,728	\$122,865
3256 Soap, Cleaning Compound and Toilet Preparation Manufacturing				\$493		\$493
3261 Plastic Product Manufacturing		\$2,134	\$1,012		\$761	\$3,907
3273 Cement and Concrete Product Manufacturing				\$1,999		\$1,999
3329 Other Fabricated Metal Product Manufacturing		\$10,028	\$56,095	\$69,624	\$18,278	\$154,025
3333 Commercial and Service Industry Machinery Manufacturing				\$25,509		\$25,509
3339 Other General-Purpose Machinery Manufacturing			\$7,075		\$3,154	\$10,229
3343 Audio and Video Equipment Manufacturing					\$69,556	\$69,556
3345 Navigational, Measuring, Medical and Control Instruments Manufacturing				\$3,067		\$3,067
3369 Other Transportation Equipment Manufacturing			\$39,563			\$39,563
3371 Household and Institutional Furniture and Kitchen Cabinet Manufacturing			\$18,013			\$18,013

	2003	2004	2005	2006	2007	Total
3391 Medical Equipment and Supplies Manufacturing					\$2,065	\$2,065
3399 Other Miscellaneous Manufacturing			\$5,321	\$4,702	\$137,415	\$147,438
4121 Petroleum Product Wholesaler-Distributors		\$4,222	\$17,471	\$14,580	\$154,671	\$190,944
4131 Food Wholesaler-Distributors					\$17,932	\$17,932
4132 Beverage Wholesaler-Distributors		\$741	\$1,400	\$3,349	\$133,778	\$139,268
4141 Textile, Clothing and Footwear Wholesaler-Distributors			\$5,374	\$54,074	\$623,109	\$682,557
4143 Home Furnishings Wholesaler-Distributors					\$19,602	\$19,602
4144 Personal Goods Wholesaler-Distributors				\$45,427	\$5,928	\$51,355
4145 Pharmaceuticals, Toiletries, Cosmetics and Sundries Wholesaler-Distributors					\$9,279	\$9,279
4161 Electrical, Plumbing, Heating and Air-Conditioning Equipment and Supplies Wholesaler-Distributors					\$303	\$303
4162 Metal Service Centres				\$44	\$599	\$643
4172 Construction, Forestry, Mining, and Industrial Machinery, Equipment and Supplies Wholesaler-Distributors				\$678	\$48,850	\$49,528
4173 Computer and Communications Equipment and Supplies Wholesaler-Distributors					\$58,485	\$58,485
4179 Other Machinery, Equipment and Supplies Wholesaler-Distributors		\$232	\$10,191	\$10,568	\$726,634	\$747,624
4181 Recyclable Material Wholesaler-Distributors		\$235	\$702	\$74	\$10,480	\$11,491
4182 Paper, Paper Product and Disposable Plastic Product Wholesaler-Distributors				\$40,000	\$8,024	\$48,024
4189 Other Miscellaneous Wholesaler-Distributors			\$1,415	\$210,864	\$271,981	\$484,260
4411 Automobile Dealers					\$100,000	\$100,000
4412 Other Motor Vehicle Dealers					\$47,208	\$47,208
4413 Automotive Parts, Accessories and Tire Stores			\$51	\$41,834	\$19,278	\$61,163
4431 Electronics and Appliance Stores		\$201	\$7,752	\$71,277	\$28,864	\$108,094
4441 Building Material and Supplies Dealers		\$213	\$5,309	\$42,537	\$87,712	\$135,771
4442 Lawn and Garden Equipment and Supplies Stores					\$1,720	\$1,720
4451 Grocery Stores				\$548	\$533	\$1,081
4452 Specialty Food Stores					\$27,400	\$27,400
4453 Beer, Wine and Liquor Stores					\$11,707	\$11,707
4461 Health and Personal Care Stores				\$164	\$273,852	\$274,016
4471 Gasoline Stations		\$287	\$1,478	\$6,792	\$3,727	\$12,284
4481 Clothing Stores		\$9,736	\$241	\$5,876	\$2,404	\$18,256
4483 Jewellery, Luggage and Leather Goods Stores				\$15,733		\$15,733

	2003	2004	2005	2006	2007	Total
4511 Sporting Goods, Hobby and Musical Instrument Stores			\$4,579	\$214,176	\$92,593	\$311,348
4512 Book, Periodical and Music Stores		\$152	\$85	\$228	\$16,060	\$16,526
4521 Department Stores					\$13,794	\$13,794
4529 Other General Merchandise Stores				\$2,313	\$3,685	\$5,998
4531 Florists				\$477	\$5,820	\$6,297
4532 Office Supplies, Stationery and Gift Stores	\$1,715	\$14,458	\$9,603	\$23,699	\$53,399	\$102,873
4539 Other Merchandise Stores		\$219	\$2,355	\$24,594	\$32,331	\$59,499
4541 Electronic Shopping and Mail-Order Houses		\$56		\$3,644	\$1,298	\$4,998
4811 Scheduled Air Transportation	\$18,082	\$39,425	\$135,859	\$84,837	\$300,963	\$579,166
4812 Non-Scheduled Air Transportation		\$699		\$2,119	\$20,178	\$22,996
4841 General Freight Trucking		\$17,973	\$34,853	\$100,935	\$255,200	\$408,961
4842 Specialized Freight Trucking		\$482	\$14,075	\$14,973	\$89,597	\$119,126
4851 Urban Transit Systems			\$12		\$2,498	\$2,510
4853 Taxi and Limousine Service		\$1,265	\$2,010	\$3,578		\$6,853
4854 School and Employee Bus Transportation					\$267,536	\$267,536
4855 Charter Bus Industry				\$3,928	\$2,879	\$6,807
4859 Other Transit and Ground Passenger Transportation		\$314	\$2,759	\$1,645		\$4,718
4871 Scenic and Sightseeing Transportation, Land					\$900	\$900
4881 Support Activities for Air Transportation				\$2,120		\$2,120
4911 Postal Service		\$686		\$1,276	\$4,842	\$6,804
4921 Couriers			\$1,026	\$6,608	\$6,461	\$14,096
4931 Warehousing and Storage				\$254	\$648	\$902
5111 Newspaper, Periodical, Book and Directory Publishers		\$7,366	\$8,283	\$34,146	\$394,592	\$444,387
5112 Software Publishers		\$17,875	\$8,621	\$9,450	\$3,704	\$39,650
5121 Motion Picture and Video Industries				\$500	\$9,540	\$10,040
5122 Sound Recording Industries					\$5,231	\$5,231
5151 Radio and Television Broadcasting			\$2,735	\$3,403	\$802,475	\$808,613
5161 Internet Publishing and Broadcasting			\$11,054			\$11,054
5171 Wired Telecommunications Carriers	\$4,569	\$632	\$327	\$207	\$602,936	\$608,671
5172 Wireless Telecommunications Carriers (except Satellite)		\$13	\$840	\$343	\$220,989	\$222,185
5174 Satellite Telecommunications					\$25,000	\$25,000
5181 Internet Service Providers, Web Search Portals		\$5,807	\$864	\$9,326		\$15,997
5182 Data Processing, Hosting, and Related Services			\$117			\$117
5221 Depository Credit Intermediation					\$50,000	\$50,000
5222 Non-Depository Credit Intermediation		\$277				\$277

	2003	2004	2005	2006	2007	Total
5223 Activities Related to Credit Intermediation				\$16,222		\$16,222
5242 Agencies, Brokerages and Other Insurance Related Activities				\$25,201	\$24,810	\$50,011
5245 Agencies, Brokerages and Other Insurance Related Activities		\$524	\$1,340	\$59,480	\$1,800	\$63,144
5311 Lessors of Real Estate				\$3,215		\$3,215
5312 Offices of Real Estate Agents and Brokers					\$8,000	\$8,000
5321 Automotive Equipment Rental and Leasing		\$251	\$5,789	\$9,888	\$237,651	\$253,580
5322 Consumer Goods Rental					\$44,667	\$44,667
5323 General Rental Centres			\$1,689		\$85,926	\$87,616
5324 Commercial and Industrial Machinery and Equipment Rental and Leasing		\$452	\$231,963	\$487,763	\$797,065	\$1,517,243
5411 Legal Services				\$138	\$30,000	\$30,138
5412 Accounting, Tax Preparation, Bookkeeping and Payroll Services		\$10,797	\$36,776	\$29,310	\$4,146	\$81,029
5413 Architectural, Engineering and Related Services	\$1,070	\$106,469	\$72,853	\$133,192	\$41,860	\$355,444
5414 Specialized Design Services		\$1,219	\$29,697	\$45,942	\$201,463	\$278,322
5415 Computer Systems Design and Related Services		\$141	\$50,045	\$7,193	\$24,412	\$81,792
5416 Management, Scientific and Technical Consulting Services		\$8,501	\$87,634		\$88,734	\$184,869
5418 Advertising and Related Services	\$22,648		\$13,610	\$835,290	\$2,541,676	\$3,413,224
5419 Other Professional, Scientific and Technical Services		\$172,848	\$291,472	\$154,358	\$231,555	\$850,234
5611 Office Administrative Services					\$100,000	\$100,000
5614 Business Support Services			\$641	\$1,986	\$13,699	\$16,325
5615 Travel Arrangement and Reservation Services					\$216,980	\$216,980
5616 Investigation and Security Services			\$13,721	\$192	\$7,637	\$21,550
5617 Services to Buildings and Dwellings		\$39,579	\$27,619	\$16,265	\$44,240	\$127,702
5619 Other Support Services			\$150			\$150
5621 Waste Collection			\$37,557		\$16,569	\$54,126
5622 Waste Treatment and Disposal				\$138	\$13,886	\$14,023
5629 Remediation and Other Waste Management Services				\$8,962	\$3,000	\$11,962
6111 Elementary and Secondary Schools				\$50	\$2,755	\$2,805
6112 Community Colleges and C.E.G.E.P.s			\$1,409	\$50,835	\$765,226	\$817,470
6114 Business Schools and Computer and Management Training				\$4,984		\$4,984
6116 Other Schools and Instruction	\$4,000	\$2,124	\$2,337	\$4,863	\$16,783	\$30,108
6213 Offices of Other Health Practitioners				\$597	\$1,352	\$1,949

	2003	2004	2005	2006	2007	Total
6219 Other Ambulatory Health Care Services					\$635	\$635
6244 Child Day-Care Services		\$140		\$225		\$365
7111 Performing Arts Companies				\$2,269	\$81,202	\$83,472
7113 Promoters (Presenters) of Performing Arts, Sports and Similar Events			\$2,250	\$330,337	\$285,132	\$617,720
7114 Agents and Managers for Artists, Athletes, Entertainers and Other Public Figures				\$41,200	\$37,198	\$78,398
7115 Independent Artists, Writers and Performers			\$1,575	\$73,065	\$205,690	\$280,330
7121 Heritage Institutions			\$644	\$132		\$776
7139 Other Amusement and Recreation Industries		\$70,406	\$107,916	\$149,812	\$164,859	\$492,992
7211 Traveller Accommodation	\$1,506	\$27,327	\$74,841	\$52,738	\$1,072,632	\$1,229,044
7212 RV (Recreational Vehicle) Parks and Recreational Camps					\$3,000	\$3,000
7221 Full-Service Restaurants	\$502	\$4,831	\$24,642	\$35,383	\$262,873	\$328,232
7222 Limited-Service Eating Places			\$288		\$38,000	\$38,288
7223 Special Food Services	\$18,421	\$7,622	\$7,448	\$11,001	\$90,152	\$134,643
7224 Drinking Places (Alcoholic Beverages)					\$2,060	\$2,060
8111 Automotive Repair and Maintenance				\$9,578	\$9,165	\$18,743
8112 Electronic and Precision Equipment Repair and Maintenance		\$240		\$6,425	\$115	\$6,779
8113 Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance				\$158	\$678	\$836
8114 Personal and Household Goods Repair and Maintenance				\$25,633	\$1,632	\$27,265
8121 Personal Care Services					\$800	\$800
8123 Dry Cleaning and Laundry Services					\$150	\$150
8134 Civic and Social Organizations		\$3,692	\$85,360	\$46,423	\$20,604	\$156,080
8139 Business, Professional, Labour and Other Membership Organizations			\$1,000		\$9,252	\$10,252
8141 Private Households		\$250	\$925	\$6,875	\$8,230	\$16,280
9119 Other Federal Government Public Administration		\$71,581	\$189,569	\$227,488	\$67	\$488,705
9122 Provincial Labour and Employment Services		\$1,149	\$3,688	\$13,258	\$6,100	\$24,195
9129 Other Provincial and Territorial Public Administration		\$8,265	\$15,365	\$56,615	\$26,538	\$106,783
9139 Other Local, Municipal and Regional Public Administration	\$321	\$4,601	\$107	\$20,100	\$25	\$25,154
9141 Aboriginal Public Administration			\$100	\$425	\$4,150	\$4,675
Grand Total	\$83,722	\$1,224,437	\$2,153,409	\$4,828,172	\$15,001,954	\$23,291,693

Table 21 Canada Winter Games operations spending by industry NAICS 2 and 3-digit code: 2003 to 2007

<i>Industry</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>Grand Total</i>
11 Agriculture, Forestry, Fishing and Hunting						0
21 Mining and Oil and Gas Extraction						
212 Mining (except Oil and Gas)			30,418	15,939		46,357
213 Support Activities for Mining and Oil and Gas Extraction			1,766	875	2,480	5,120
<i>21 Mining and Oil and Gas Extraction Total</i>			<i>32,183</i>	<i>16,814</i>	<i>2,480</i>	<i>51,477</i>
22 Utilities						
221 Utilities		2,997	9,372	14,598	116,160	143,127
<i>22 Utilities Total</i>		<i>2,997</i>	<i>9,372</i>	<i>14,598</i>	<i>116,160</i>	<i>143,127</i>
23 Construction						
236 Construction of Buildings	10,887	28,337	10,723	159,157	43,620	252,724
237 Heavy and Civil Engineering Construction		510,290	222,014	183,768	146,363	1,062,435
238 Specialty Trade Contractors			24,705	154,335	367,797	546,837
<i>23 Construction Total</i>	<i>10,887</i>	<i>538,627</i>	<i>257,441</i>	<i>497,260</i>	<i>557,780</i>	<i>1,861,996</i>
31-33 Manufacturing						
311 Food Manufacturing		821	2,261	4,502	28,639	36,223
312 Beverage and Tobacco Product Manufacturing					25,000	25,000
315 Clothing Manufacturing		205	7,739	33,289	40,823	82,056
321 Wood Product Manufacturing				695	45,075	45,770
323 Printing and Related Support Activities		3,046	3,873	37,218	78,728	122,865
325 Chemical Manufacturing				493		493
326 Plastics and Rubber Products Manufacturing		2,134	1,012		761	3,907
327 Non-Metallic Mineral Product Manufacturing				1,999		1,999
332 Fabricated Metal Product Manufacturing		10,028	56,095	69,624	18,278	154,025
333 Machinery Manufacturing			7,075	25,509	3,154	35,738
334 Computer and Electronic Product Manufacturing				3,067	69,556	72,623
336 Transportation Equipment Manufacturing			39,563			39,563
337 Furniture and Related Product Manufacturing			18,013			18,013
339 Miscellaneous Manufacturing			5,321	4,702	139,480	149,502
<i>31-33 Manufacturing Total</i>		<i>16,235</i>	<i>140,953</i>	<i>181,098</i>	<i>449,493</i>	<i>787,779</i>
41 Wholesale Trade						
412 Petroleum Product Wholesaler-Distributors		4,222	17,471	14,580	154,671	190,944
413 Food, Beverage and Tobacco Wholesaler-Distributors		741	1,400	3,349	151,710	157,200
414 Personal and Household Goods Wholesaler-Distributors			5,374	99,501	657,919	762,793

<i>Industry</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>Grand Total</i>
416 Building Material and Supplies Wholesaler-Distributors				44	903	947
417 Machinery, Equipment and Supplies Wholesaler-Distributors		232	10,191	11,245	833,969	855,637
418 Miscellaneous Wholesaler-Distributors		235	2,116	250,938	290,485	543,775
<i>41 Wholesale Trade Total</i>		<i>5,430</i>	<i>36,552</i>	<i>379,658</i>	<i>2,089,656</i>	<i>2,511,295</i>
44-45 Retail Trade						
441 Motor Vehicle and Parts Dealers			51	41,834	166,486	208,371
443 Electronics and Appliance Stores		201	7,752	71,277	28,864	108,094
444 Building Material and Garden Equipment and Supplies Dealers		213	5,309	42,537	89,432	137,491
445 Food and Beverage Stores				548	39,640	40,188
446 Health and Personal Care Stores				164	273,852	274,016
447 Gasoline Stations		287	1,478	6,792	3,727	12,284
448 Clothing and Clothing Accessories Stores		9,736	241	21,609	2,404	33,989
451 Sporting Goods, Hobby, Book and Music Stores		152	4,664	214,404	108,653	327,874
452 General Merchandise Stores				2,313	17,479	19,793
453 Miscellaneous Store Retailers	1,715	14,677	11,957	48,770	91,550	168,670
454 Non-Store Retailers		56		3,644	1,298	4,998
<i>44-45 Retail Trade Total</i>	<i>1,715</i>	<i>25,322</i>	<i>31,452</i>	<i>453,893</i>	<i>823,385</i>	<i>1,335,768</i>
48-49 Transportation and Warehousing						
481 Air Transportation	18,082	40,124	135,859	86,956	321,141	602,162
484 Truck Transportation		18,454	48,928	115,908	344,796	528,086
485 Transit and Ground Passenger Transportation		1,579	4,781	9,150	272,913	288,423
487 Scenic and Sightseeing Transportation					900	900
488 Support Activities for Transportation				2,120		2,120
491 Postal Service		686		1,276	4,842	6,804
492 Couriers and Messengers			1,026	6,608	6,461	14,096
493 Warehousing and Storage				254	648	902
<i>48-49 Transportation and Warehousing Total</i>	<i>18,082</i>	<i>60,844</i>	<i>190,594</i>	<i>222,272</i>	<i>951,702</i>	<i>1,443,493</i>
51 Information and Cultural Industries						
511 Publishing Industries (except Internet)		25,241	16,904	43,596	398,296	484,037
512 Motion Picture and Sound Recording Industries				500	14,771	15,271
515 Broadcasting (except Internet)			2,735	3,403	802,475	808,613
516 Internet Publishing and Broadcasting			11,054			11,054
517 Telecommunications	4,569	645	1,168	550	848,925	855,857
518 Internet Service Providers, Web Srch Portals, and Data Processing		5,807	981	9,326		16,114
<i>51 Information and Cultural Industries Total</i>	<i>4,569</i>	<i>31,693</i>	<i>32,842</i>	<i>57,375</i>	<i>2,064,467</i>	<i>2,190,946</i>

<i>Industry</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>Grand Total</i>
52 Finance and Insurance						
522 Credit Intermediation and Related Activities		277		16,222	50,000	66,499
524 Insurance Carriers and Related Activities		524	1,340	84,681	26,610	113,155
<i>52 Finance and Insurance Total</i>		<i>801</i>	<i>1,340</i>	<i>100,903</i>	<i>76,610</i>	<i>179,654</i>
53 Real Estate and Rental and Leasing						
531 Real Estate				3,215	8,000	11,215
532 Rental and Leasing Services		703	239,441	497,651	1,165,310	1,903,105
<i>53 Real Estate and Rental and Leasing Total</i>		<i>703</i>	<i>239,441</i>	<i>500,866</i>	<i>1,173,310</i>	<i>1,914,320</i>
54 Professional, Scientific and Technical Services						
541 Professional, Scientific and Technical Services	23,718	299,976	582,088	1,205,423	3,163,846	5,275,052
<i>54 Professional, Scientific and Technical Services Total</i>	<i>23,718</i>	<i>299,976</i>	<i>582,088</i>	<i>1,205,423</i>	<i>3,163,846</i>	<i>5,275,052</i>
56 Administrative and Support, Waste Management and Remediation						
561 Administrative and Support Services		39,579	42,131	18,443	382,555	482,708
562 Waste Management and Remediation Services			37,557	9,100	33,455	80,112
<i>56 Administrative and Support, Waste Mgmt and Remediation Total</i>		<i>39,579</i>	<i>79,688</i>	<i>27,543</i>	<i>416,010</i>	<i>562,820</i>
61 Educational Services						
611 Educational Services	4,000	2,124	3,746	60,731	784,764	855,366
<i>61 Educational Services Total</i>	<i>4,000</i>	<i>2,124</i>	<i>3,746</i>	<i>60,731</i>	<i>784,764</i>	<i>855,366</i>
62 Health Care and Social Assistance						
621 Ambulatory Health Care Services				597	1,987	2,583
624 Social Assistance		140		225		365
<i>62 Health Care and Social Assistance Total</i>		<i>140</i>		<i>822</i>	<i>1,987</i>	<i>2,948</i>
71 Arts, Entertainment and Recreation						
711 Performing Arts, Spectator Sports and Related Industries			3,825	446,872	609,222	1,059,919
712 Heritage Institutions			644	132		776
713 Amusement, Gambling and Recreation Industries		70,406	107,916	149,812	164,859	492,992
<i>71 Arts, Entertainment and Recreation Total</i>		<i>70,406</i>	<i>112,385</i>	<i>596,815</i>	<i>774,081</i>	<i>1,553,687</i>
72 Accommodation and Food Services						
721 Accommodation Services	1,506	27,327	74,841	52,738	1,075,632	1,232,044
722 Food Services and Drinking Places	18,923	12,453	32,378	46,384	393,085	503,223
<i>72 Accommodation and Food Services Total</i>	<i>20,429</i>	<i>39,780</i>	<i>107,219</i>	<i>99,123</i>	<i>1,468,717</i>	<i>1,735,267</i>
81 Other Services (except Public Administration)						
811 Repair and Maintenance		240		41,793	11,590	53,623
812 Personal and Laundry Services					950	950
813 Religious, Grant-Making, Civic, and Professional and Similar Orgs.		3,692	86,360	46,423	29,857	166,332

<i>Industry</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>Grand Total</i>
814 Private Households		250	925	6,875	8,230	16,280
<i>81 Other Services Total</i>		<i>4,182</i>	<i>87,285</i>	<i>95,092</i>	<i>50,627</i>	<i>237,186</i>
91 Public Administration						
911 Federal Government Public Administration		71,581	189,569	227,488	67	488,705
912 Provincial and Territorial Public Administration		9,414	19,052	69,874	32,638	130,979
913 Local, Municipal and Regional Public Administration	321	4,601	107	20,100	25	25,154
914 Aboriginal Public Administration			100	425	4,150	4,675
<i>91 Public Administration Total</i>	<i>321</i>	<i>85,597</i>	<i>208,828</i>	<i>317,887</i>	<i>36,880</i>	<i>649,513</i>
Grand Total	83,722	1,224,437	2,153,409	4,828,172	15,001,954	23,291,693

Table 22 Canada Winter Games operations spending by province and by year: 2003 to 2007

<i>Location</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>Total</i>
AB		6,974	51,607	101,227	1,426,242	1,586,050
BC		18,562	84,826	604,692	1,087,598	1,795,678
MB			66	116,300	38,854	155,220
NB					619	619
NL			2,000	28	33,600	35,628
NS			204			204
NU			2,959	2,066	23,784	28,810
NWT		24,910	65,918	39,344	182,530	312,701
ON		120,267	346,105	1,004,098	4,602,339	6,072,809
QC		5,585	122,450	119,794	160,116	407,944
SK		1,771	40,939	20,187	139,826	202,723
YT	83,722	1,022,294	1,426,928	2,775,427	7,277,530	12,585,902
USA		24,075	9,408	45,010	28,914	107,407
Total	83,722	1,224,437	2,153,409	4,828,172	15,001,954	23,291,693

5.2 Survey instrument

Canada Winter Games - WHITEHORSE 2007

Date:

Interviewer:

Please do not complete this survey if you have already completed one.

SECTION 1: TICKET PROFILE

1. Are you PRIMARILY: (✓ only ONE)

- ☐ A Yukon resident (Please do NOT complete this survey)
☐ An athlete in the Games
☐ A parent/guardian/friend or sibling of an athlete in the Games
☐ A coach, trainer or manager, official, judge or referee
☐ Chef de mission/Provincial délégation/Media
☐ Spectator/Outside visitor

2. What type of ticket are you using TODAY?

- ☐ Daily ☐ Weekly ☐ Event ☐ Comp/VIP

3. Which of the following venues (places) will you visit TODAY?

- ☐ Better Bodies ☐ Mt. McIntyre ☐ Vanier High School
☐ Canada Games Centre ☐ Mt. Sima ☐ Yukon Arts Centre
☐ F.H. Collins High School ☐ Porter Creek Secondary
☐ Grey Mountain ☐ Takhini Arena

4. For the entire Games how many tickets did you purchase for yourself that were:

Daily tickets # ____ Weekly tickets # ____ Event tickets # ____ Comp tickets/passes # ____

SECTION 2: PARTY PROFILE

5. Please describe your Immediate Travel Party. This Travel Party is defined as the people you are travelling with and are sharing expenses and travel decisions with. It does NOT include members of your team, association or other people you know, but whom you are not directly sharing expenses with. Include adults and children.

Travel Party	Year Born	Are you/they an athlete?
Yourself		☐ Yes ☐ No
Other #2		☐ Yes ☐ No
Other #3		☐ Yes ☐ No
Other #4		☐ Yes ☐ No
Other #5		☐ Yes ☐ No
Other #6		☐ Yes ☐ No

SECTION 3: TRIP PROFILE

6. On this trip, how many TOTAL nights will you be away from home? # of Nights ____

7. How many of these nights are in the Yukon Territory? # of Nights ____

8. While in the Yukon for the Games, did you visit any other Yukon communities outside of Whitehorse?

☐ No ☐ Yes – Where? _____

9. Are you staying:

- ☐ In a hotel/motel/B&B ☐ At the athletes' village ☐ Private rental property
☐ At a friend/family home ☐ In the Northstay (home) program ☐ Other _____

10. To get to the Yukon, did you:

- ☐ Fly to the Yukon ☐ Bus/Motorcoach
☐ Drive to the Yukon ☐ Other _____

➡ GO TO SIDE 2 ➡

SECTION 4: TRIP SPENDING

11. Now think about the money you and your Travel Party (as listed above) spent to get to the Yukon and IN the Yukon. If your trip is not yet over, please estimate the spending for the entire trip. Please include the spending by all members of your Travel Party. How much did you spend on each of the following? Include the costs even if they are being paid by your company or organization.

Item	Cost \$\$	Paid by: Self	Paid by: Company/ organization	Comp (paid by CWG or Yukon)
Hotel or other accommodation		☐	☐	☐
Restaurants and other food services (concessions, snacks, etc.)		☐	☐	☐
Event tickets		☐	☐	☐
Other entertainment, recreation, arts, shows, etc		☐	☐	☐
Event merchandise (CWG clothing, souvenirs, etc)		☐	☐	☐
Other shopping, including groceries, gasoline, and all other local stores etc.		☐	☐	☐
Vehicle expenses (rental car, parking, city bus fees, taxis, etc., except gasoline)		☐	☐	☐
Airfare/busfare to the Yukon		☐	☐	☐

SECTION 5: TRAVEL INTENTIONS

12. Before the Games began on Feb 22, did you come to the Yukon for a related Canada Winter Games activity? ☐ No ☐ Yes

If YES, On those prior trips, how many nights did you spend in the Yukon? ____ # nights

13. Please rate how much the Games may have increased your awareness for each of the three Territories. Use a scale where a "1" means it Did Not Increase your awareness to a "5" meaning the Games Greatly Increased your awareness.

	No Increase ⇄ Greatly Increased					You already had a high level of awareness about this Territory
	1	2	3	4	5	
Yukon	☐	☐	☐	☐	☐	☐
Northwest Territories	☐	☐	☐	☐	☐	☐
Nunavut	☐	☐	☐	☐	☐	☐

14. Think about your interest in visiting each of the Territories in the future, because of information you learned from the Games. Use a 1 to 5 scale where "1" means you are Much Less Interested and "5" means you are Much More Interested.

	Less Interested ⇄ More Interested					You already had a high level of interest in visiting this Territory
	1	2	3	4	5	
Yukon	☐	☐	☐	☐	☐	☐
Northwest Territories	☐	☐	☐	☐	☐	☐
Nunavut	☐	☐	☐	☐	☐	☐

15. In the next 2 years, how likely are you to visit each of the Territories?

A "1" means Not at all Likely to a
"5" meaning Extremely Likely to visit.

	1	2	3	4	5
Yukon	☐	☐	☐	☐	☐
Northwest Territories	☐	☐	☐	☐	☐
Nunavut	☐	☐	☐	☐	☐

16. What is your normal place of residence?

- | | |
|--|--|
| ☐ Ontario | ☐ New Brunswick |
| ☐ Quebec | ☐ Nova Scotia |
| ☐ BC | ☐ Newfoundland |
| ☐ Alberta | ☐ PEI |
| ☐ Saskatchewan | ☐ NWT |
| ☐ Manitoba | ☐ Nunavut |
| ☐ United States | ☐ Overseas |

Thank you very much.

5.3 Original Sample plan

Goal:

Generate a representative sample of visitors to the Yukon for the Games, within the hours budgeted.

Objectives:

1. Capture a representative sample from all four target groups (athletes, coaches/officials/staff, Media/VIPs and non-Yukon spectators).
2. Survey as many as possible in the hours budgeted
3. Meet or exceed the sample targets.
4. Conduct the research in a professional manner with as little interference as possible.

Definitions

1. Event group. An event group can be:
a single sporting or cultural event with one start time;
a sporting or cultural event with multiple but closely spaced start times; or,
a scheduled event such as a media reception or flight departure.
2. A stint is defined as a set number of hours (typically between 3 and 6 hours), in which a team of interviewers will work. All stints are numbered. Some stints are limited to just one event group, while others have several groups within one stint. Stints were organized to maximize interviewer time and cover as many different event groups as possible.
3. Team. The team of interviewers will consist of either 2 or 3 persons, depending on the event and target group.

Steps used to generate the sample stints.

1. All events (sporting events, airport departures, cultural events, receptions, etc.) were listed in a database, showing the date, start time, and duration, - by event groups. There are 121 event groups.
2. Those event groups were then grouped into stints – based on start times and locations. There are a total of 78 stints.
3. A spreadsheet was used to determine the total number of hours that could be allocated to each target group. Based on an estimated number of completes an interviewer would get per hour, the total number of stints available within the budget was determined.
4. Based on the number of stints by target group, the sample was chosen. The following processes were followed:
 - All possible stints for the Media/VIPs, the coaches/officials/staff, and the athletes were chosen, in order to try and reach the completion targets.
 - For visitors, there were a possible 61 stints, but only the budget to survey 21 of these. Of the 21, 13 stints were available at the airport. It was decided that 6 of the airport stints would remain in the sample and other 7 would not.
 - Two events — snowboarding and long-track speed skating — that would be completely excluded by a random pull (due to being held on non-sample days) were pre-selected

- The remaining 46 stints were organized by event with 13 remaining to be selected. A selection was made to gain the greatest coverage of all events.
5. A review of the events was then done to try and ensure that no single sport was completely eliminated from the sample, and no sport was over-represented. The logic being that visitors to the events will often include the friends and family of those in that sport, and surveying at the same event will result in fewer unique visitors to capture.

	Sample	Flow	Hours	Available	hours per	Stints need	# interviewer	# of stints	hours
	Target	Rate	Needed	Stints	stint	to make targe	per stint	covered	used
TOTAL									
Athletes/Coachs/mangers/official	489	5	97.85	8	3.5	28.0	2	8	56
Athletes (+/-	336	8	42.05						
Coaches/mangers/officials/missio									
staff (+/- 7.5)	153	3	50.95						
TOTAL									
	233	3	77.67	9	3.5	22.2	3	9	94.5
Media (+/-	92	3	30.67						
VIPs (+/- 7.5)	141	3	47.00						
Outside visitors (+/-	818	8	102.24	61	4	25.6	2	21	168
- Airport				13					
Events				48					
TOTAL	1773.22		350.58	78.00					318.5

Final Selection

The following stints are included. All others will act as alternates.

Summary

Target group	Date	sport	event start times	location	hours needed	stint start time	stint end time	stint hours	stint number
visitor	28/02/2007	snowboarding	10:00	Mt Sima	2	9:00 AM	11:00 AM	6	1
visitor	28/02/2007	snowboarding	13:00	Mt Sima	2	12:00 PM	2:00 PM		1
visitor	28/02/2007	speed skating - long	9:00:00 , 11:30	FH Collins	3.5	8:30:00 AM	12:00 PM	4	2
visitor	01/03/2007	Culture Program	12:00	YAC	1	11:15:00 AM	12:15:00 PM	8	4
visitor	01/03/2007	Culture Program	16:00	YAC	1	3:15:00 PM	4:15:00 PM		4
visitor	01/03/2007	Shooting	13:45	Vanier	1	1:00 PM	2:00 PM		4
visitor	01/03/2007	Hockey - Men's	17:30	Tak	1	4:45:00 PM	5:45:00 PM		4
visitor	01/03/2007	Hockey - Men's	15:30	CGC	1	2:45:00 PM	3:45:00 PM		5
visitor	01/03/2007	Hockey - Men's	17:30	CGC	1	4:45:00 PM	5:45:00 PM	4	5
visitor	01/03/2007	Speed skating - short	16:50	CGC	1	4:00 PM	5:00 PM		5
visitor	01/03/2007	Shooting	8:30	Vanier	1	8:00 AM	8:45:00 AM	7	8
visitor	01/03/2007	Speed skating - short	13:40	CGC	1	1:15:00 PM	2:00 PM		8
visitor	01/03/2007	Ringette	10:00, 12:00	CGC	3	9:30:00 AM	12:30:00 PM		8
visitor	01/03/2007	Badminton	13:00	CGC	1	12:15:00 PM	1:15:00 PM		8
visitor	01/03/2007	Archery	9:00, 11:30	Porter Ck Secondary	4	8:30:00 AM	11:30:00 AM		10
visitor	01/03/2007	Inuit Games	1:00	FH Collins	1	12:15:00 PM	1:15:00 AM	6	10
visitor	01/03/2007	Freestyle Skiing	10:15, 1:30	Mt. Sima	4.5	9:30:00 AM	2:00 PM	6	11
visitor	02/03/2007	Judo	10:00	CGC	1	9:15:00 AM	10:15:00 AM		16
visitor	02/03/2007	Badminton	9:00	CGC	1	8:15:00 AM	9:15:00 AM	5	16
visitor	02/03/2007	Synchro	8:25, 9:50	CGC	2	8:00 AM	10:00 AM		16
visitor	02/03/2007	Hockey - Men's	12:30	CGC	1	11:45:00 AM	12:45:00 PM		16
visitor	02/03/2007	Hockey - Men's	9:00	CGC	1	8:15:00 AM	9:15:00 AM		16
visitor	02/03/2007	Biathlon	12:00, 1:00	Grey Mt	2	11:30:00 AM	1:30:00 AM		17
visitor	02/03/2007	Biathlon	9:00, 10:00	Grey Mt	2	8:30:00 AM	10:30:00 AM	8	17
visitor	02/03/2007	Curling - Women's	14:00	Mt. Mac	1	1:15:00 PM	2:15:00 PM		19
visitor	02/03/2007	Hockey - Men's	12:30	Tak	1	11:45:00 AM	12:45:00 PM		19
visitor	02/03/2007	Culture	16:00	YAC	1	3:15:00	4:15:00	7	19

Target group	Date	sport	event start times	location	hours needed	stint start time	stint end time	stint hours	stint number
		Program				PM	PM		
visitor	02/03/2007	mixed	11:30	Airport	1	10:00 AM	11:00 AM		19
visitor	08/03/2007	Artistic Gymnastics	11:30	CGC	1	10:45:00 AM	11:45:00 AM		25
visitor	08/03/2007	Figure Skating	12:00, 3:00	CGC	4	11:15:00 AM	3:15:00 AM		25
visitor	08/03/2007	Hockey - Women's	12:30	CGC	1	11:45:00 AM	12:45:00 PM		25
visitor	08/03/2007	Table Tennis	9:00	CGC	1	8:15:00 AM	9:15:00 AM	8	25
media	08/03/2007	Media	17:00	High Co. Inn	3	5:00 PM	8:00 PM	4	30
visitor	08/03/2007	Wheelchair basket ball	14:00, 16:00	Porter Creek	3	1:15:00 PM	4:15:00 PM	6	31
visitor	08/03/2007	Wheelchair basket ball	18:00	Porter Creek	1	5:15:00 PM	6:15:00 PM		31
media	08/03/2007	Media	17:00	Westmark	3	5:00 PM	8:00 PM	4	32
visitor	08/03/2007	Boxing	19:00	FH Collins	1	6:15:00 PM	7:15:00 PM	2	33
media	07/03/2007	Media	17:00	High country Inn	3	5:00 PM	8:00 PM	4	36
visitor	09/03/2007	Fencing	10:30, 12:50	Vanier	3.5	9:45:00 AM	1:15:00 PM	4	40
visitor	09/03/2007	Hockey - Women's	15:00	CGC	1	2:15:00 PM	3:15:00 PM		43
visitor	09/03/2007	Cross country skiing	11:30, 13:00	Mt. Mac	2	11:15:00 AM	1:15:00 PM	5	43
visitor	09/03/2007	Table Tennis	18:30	CGC	1	5:45:00 PM	6:45:00 PM		46
visitor	09/03/2007	Curling - Men's	19:00	Mt. Mac	1	6:15:00 PM	7:15:00 PM		46
visitor	09/03/2007	Artistic Gymnastics	16:00	CGC	1	3:15:00 PM	4:15:00 PM	5	46
visitor	09/03/2007	Squash	15:30, 18:30	Better Bodies	4	3:00 PM	7:00 PM	5	47
visitor	09/03/2007	Dene Games	16:00	FH Collins	1	3:15:00 PM	4:15:00 PM	2	48
visitor	09/03/2007	Native Art Program	19:30	YAC	1	6:45:00 PM	7:45:00 PM	2	51
media	09/03/2007	Media	17:00	High Co Inn	3	5:00 PM	8:00 PM	4	52
media	09/03/2007	Media	17:00	Westmark	3	5:00 PM	8:00 PM	4	53
media	10/03/2007	Media	12:00	Westmark	3	12:00 PM	3:00 PM	4	54
media	10/03/2007	Media	17:00	High Co Inn	3	5:00 PM	8:00 PM	4	55
media	10/03/2007	Media	17:00	Westmark	3	5:00 PM	8:00 PM	4	56
media	10/03/2007	Media	12:00	High Co Inn	3	12:00 PM	3:00 PM	4	57
athletes	02/03/2007	Athletes	17:00	Village	3	5:00 PM	8:00 PM	4	58
visitor	04/03/2007	mixed	18:00, 20:00	Airport	2.5	5:00 PM	7:30:00 PM	4	59
athletes	03/03/2007	Athletes	14:00	Village	3	2:00 PM	5:00 PM	4	59
athletes	03/03/2007	Athletes	11:30	Village	3	11:30:00 AM	2:30:00 PM	4	60
athletes	08/03/2007	Athletes	17:00	Village	3	5:00 PM	8:00 PM	4	62
athletes	08/03/2007	Athletes	11:30	Village	3	11:30:00	2:30:00	4	63

Target group	Date	sport	event start times	location	hours needed	stint start time	stint end time	stint hours	stint number
						AM	PM		
athletes	09/03/2007	Athletes	17:00	Village	3	5:00 PM	8:00 PM	4	64
athletes	09/03/2007	Athletes	11:30	Village	3	11:30:00 AM	2:30:00 PM	4	65
visitor	03/03/2007	mixed	6:45, 8:00	Airport	1.5	6:00 AM	7:30:00 AM	2	66
visitor	03/03/2007	mixed	12:20, 13:45, 14:55	Airport	4.5	11:00 AM	2:30:00 PM	6	67
athletes	04/03/2007	Athletes	10:30	Village	3	10:30:00 AM	1:30:00 AM	4	70
visitor	10/03/2007	mixed	16:15, 17:55, 20:00	Airport	4.5	3:00 PM	7:30:00 PM	6	73
visitor	11/03/2007	mixed	12:20, 14:55, 16:15	Airport	3.25	11:15:00 AM	3:45:00 PM	6	76
visitor	08/03/2007	Alpine skiing	10:00, 11:00, 1:30, 2:30	Mt Sima	4.5	9:30:00 AM	2:00 AM	6	78

5.4 *Survey response data*

Under separate cover.