

The Games effect.

Report 6: Preliminary Economic Impact of the 2010 Olympic and Paralympic Winter Games on British Columbia and Canada to March 31, 2010



Summary of Key Findings

PricewaterhouseCoopers (PwC) has been engaged to conduct a series of reports assessing the impacts associated with the 2010 Olympic and Paralympic Games (the 2010 Winter Games).

In this report, we estimate the economic impacts of the 2010 Winter Games through March 31, 2010. At the time of writing, certain data are preliminary and not final. As such, our findings are preliminary and subject to change. Our key findings are:

The midpoint for the range of real Gross Domestic Product (GDP) impacts from 2003 through to March 31, 2010 estimated by PwC is \$2.3 billion. The midpoint for employment impacts for the PwC study is 45,500 person years.

VANOC's total operating budget for the 2010 Winter Games is equal to approximately \$1.76 billion, 82% of which is assumed to be incremental.

We have estimated incremental VANOC venue construction and construction by other third party investors to be approximately \$1.22 billion.

Incremental hotel revenues in BC as a result of hosting the 2010 Winter Games were roughly \$130 million higher than expected.

Incremental tourism expenditures attributable to hosting the 2010 Winter Games from 2003 to March 31, 2010 are estimated to be \$463 million.

Incremental spending for pavilions and hospitality houses was approximately \$90 million.

The 2010 Winter Games generated a substantial amount of media coverage, reaching a potential audience of 3.8 billion people worldwide.

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Background

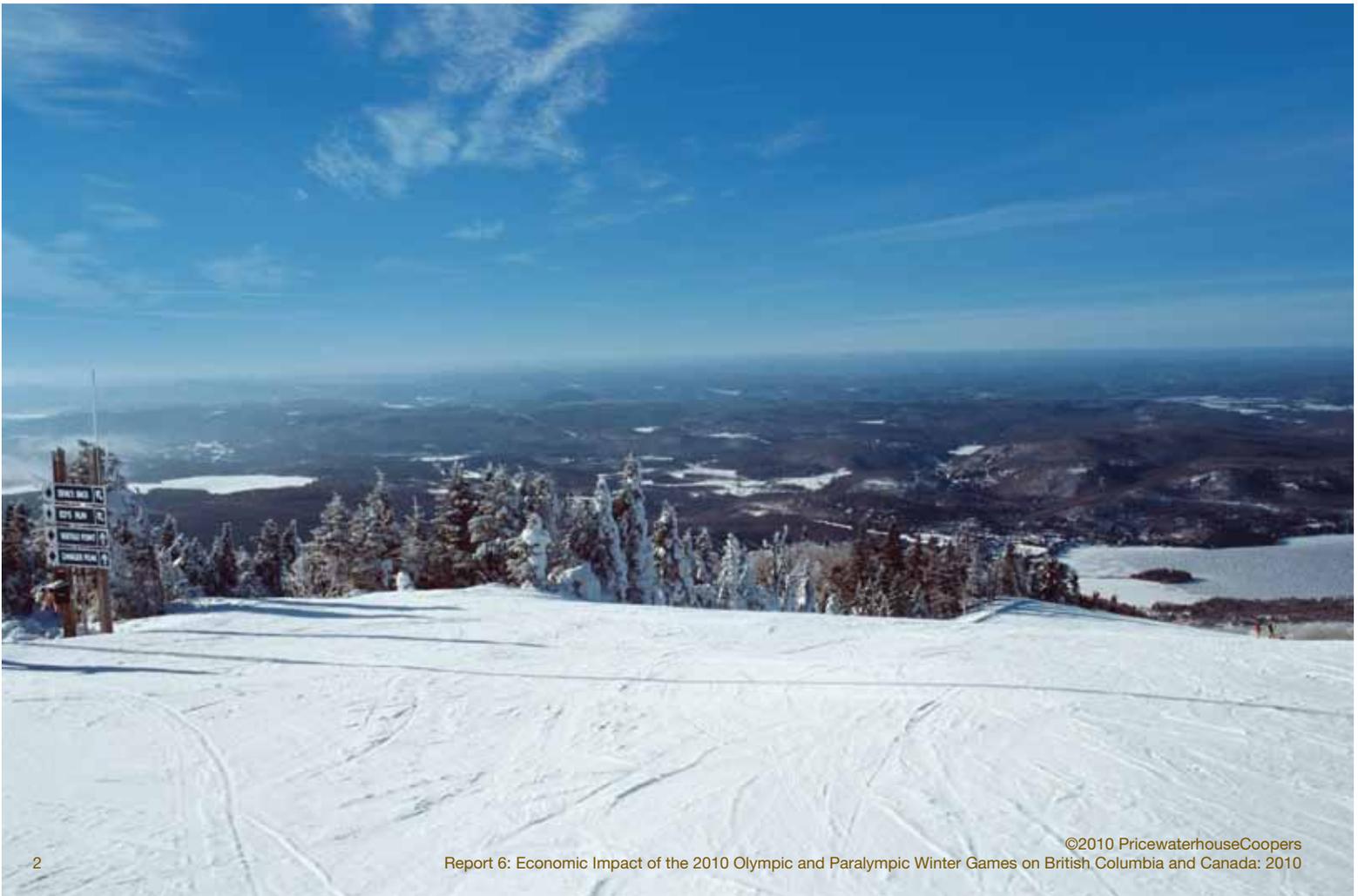
Introduction

During February and March 2010, Vancouver and Whistler hosted the world for the 2010 Olympic and Paralympic Winter Games (the 2010 Winter Games). In addition to the immense pride Canadians felt at watching our elite athletes compete and accumulate gold medals, these Games provided a boost to the provincial and national economies.

The Government of British Columbia through the BC Olympic and Paralympic Winter Games Secretariat (the BC Secretariat) and the Government of Canada through the 2010 Olympic and Paralympic Winter Games Federal Secretariat (the Federal Secretariat) have identified the need to assess the economic and social impacts of the 2010 Winter Games before, during, and after hosting the Games.

PricewaterhouseCoopers LLP (PwC) has been engaged to conduct a series of impact assessments using a combination of research and benchmarking methods. The entire project will run from 2008 through 2013. The first five reports in the series are:

- **Report 1:** Discusses the overall project methodology (the Framework Report)
- **Report 2:** Summarizes the impact of the 2010 Winter Games from 2003 to 2007
- **Report 3:** Provides a detailed report of the impacts of the 2010 Winter Games from 2003 to 2008
- **Report 4:** Compares the estimated impacts experienced from the time of the award of the Games in 2003 through 2008 to economic impacts that were projected prior to the awarding of the 2010 Winter Games
- **Report 5:** Provides a detailed report of the impacts of the 2010 Winter Games in 2009



Purpose of this Report

Reports 2, 3 and 5 each considered over 75 separate measures within eight areas related to sport, tourism, environmental sustainability, employment, economic development, business development, arts and culture, and social development. The economic sections of Reports 2, 3 and 5 considered economic development in relation to communities, Canadian business, global markets, and federal and provincial governments. A supplemental report to the main series, Report 4 compared the estimated economic impacts experienced from the time of the award of the Games to Vancouver in 2003 through 2008 to the economic impacts that were projected prior to the awarding of the 2010 Winter Games, and to the economic impacts experienced by other recent Winter Games host cities.

This report (Report 6) details the incremental economic impact of the 2010 Winter Games through the end of the Paralympic Winter Games in March 2010. It is meant to complement our previous economic impact studies covering the years 2003 to 2009.

Limitations

This report was prepared by PricewaterhouseCoopers LLP (PwC) at the request of the BC Secretariat and the Federal Secretariat. This report has been posted online with the understanding that PwC is not thereby engaged in rendering accounting, legal or other professional service or advice to the reader. The comments included in this report do not constitute professional advice, nor should they be relied upon to replace professional advice. This report is not to be published in whole or in part, without PwC's prior written consent. Any use that a third party makes of this report or reliance thereon, or any decision made based on it, is the responsibility of such third party. PwC accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken, based on this report.

The material in this report reflects PwC's best judgement in light of the information available at the time of its preparation. PwC has relied upon the completeness, accuracy and fair presentation of all the information, data, advice, opinion or representations obtained from public sources and from the BC Secretariat and the Federal Secretariat (collectively, the Information). The findings in the report are conditional upon such completeness, accuracy and fair presentation of the Information. Given the preliminary status of some data used in this report, estimates presented in this study are subject to change. PwC has not verified independently the completeness, accuracy and fair presentation of the Information.

PwC reserves the right, at its discretion, to withdraw or make revisions to the report should PwC be made aware of facts existing at the date of the report which were not known to PwC when it prepared the report. The findings are given as of the date hereof and PwC is under no obligation to advise any person of any change or matter brought to its attention after such date, which might affect the report's findings and conclusions.

Prior Studies

In January 2002, the BC Ministry of Competition, Science and Enterprise (the Ministry) published the results of a study projecting the potential economic impact of the 2010 Winter Games.

In July 2002, the British Columbia Trade and Investment Office and the BC Olympic Bid Secretariat commissioned InterVISTAS Consulting Inc. (IVC) to update the Ministry's study. The purpose of the IVC study was to review and verify the economic impacts and methodology employed in the Ministry study, and to incorporate new information that had become available subsequent to the publication of the Ministry report. In its report entitled, *The Economic Impact of the 2010 Winter Olympic and Paralympic Games – An Update*, IVC concluded that the approach and methodology employed by the Ministry were generally thorough and conceptually valid. IVC updated and made revisions to the parameters and structure of the Ministry's economic model.

This IVC report was considered in our Report 4, noted above, which compared the estimated impacts experienced from the time of the award of the Games in 2003 through 2008 to economic impacts that were projected prior to the awarding of the 2010 Winter Games

The IVC report considered economic impacts throughout 2010 to be part of the Games period. The IVC report does not provide a detailed breakdown of projected economic impacts for the January to March 2010 period, as used in this report, and we are therefore unable to compare our estimated economic impacts to the economic impacts projected by IVC.

Estimated Economic Impacts: 2010

Economic impacts arising from the 2010 Winter Games are measured as incremental to the host region. For the 2010 Winter Games, economic impacts would include the quantitative measurement of provincial Gross Domestic Product (GDP), employment, and government tax revenues from all Games-related expenditures occurring in BC by non-BC residents, businesses, and various levels of government.

The 2010 Winter Games incremental economic impact in BC was expected to be generated by federal government spending in BC and investment from other out-of-province sources. Expenditures and investment by BC residents and government were not considered to be part of the incremental impact. It was assumed that this money would have been spent on other activities in BC if the Games had not been hosted. Therefore, the incremental economic impact of the Games represented an injection into the provincial economy, generating additional GDP, employment, and tax revenues from dollars originating outside the province.

Incremental tourism economic impacts are viewed to be those due only to expenditures funded by non-residents of BC.

Incremental impacts provide a more meaningful measure of the extent to which hosting the 2010 Winter Games stimulated BC's economy. In this report we consider only incremental economic impacts.

Sources of Economic Impacts

Economic impacts arose from three principal sources:

- **Construction:** Impacts from incremental expenditures for upgrades and renovations to existing sports facilities, such as BC Place and GM Place, and construction of new facilities specifically for the 2010 Winter Games, such as the Richmond Oval
- **Operations:** VANOC expenditures for Games-related operations an of which 82% is assumed to be incremental
- **Tourism:** Impacts calculated by examining the revenues received from accommodation, retail sales, restaurants, transportation and recreation. In addition, a baseline forecast (no Games scenario) was calculated and compared to actual room night stays

Economic Impacts Estimated by PwC

As with Report 4, a range of impacts between high and low is provided. Excluded are the impact of transportation infrastructure (Sea-to-Sky Highway and Canada Line) spending and the Vancouver Convention and Exhibition Centre expansion.

Table 1 presents the high and low values of real GDP and employment estimated by PwC from January 2003 to March 31, 2010.

A midpoint of \$2.3 billion is estimated by PwC. The 2010 Winter Games year impact accounts for \$862 million of the real GDP impact.

The midpoint of employment impacts was estimated by PwC to be 45,500 jobs. The 2010 Winter Games year accounted for 17,000 jobs of the employment impact estimate.

Table 2 presents the estimated incremental expenditure for the 2010 Winter Games from January 2003 to March 31, 2010.

Table 1: Estimated Incremental Economic Impacts in BC: January 2003–March 31, 2010

PwC	Real GDP (Millions, \$2002)		Employment	
	Low	High	Low	High
Construction	\$630	\$820	11,750	15,390
Operations	\$1,180	\$1,430	19,610	28,210
Tourism*	\$220	\$270	7,320	8,720
Total	\$2,030	\$2,520	38,680	52,320

*Tourism Impacts are to March 31, 2010

Table 2: Estimated Incremental Expenditure in BC: January 2003 – March 31, 2010 (\$ millions)

Construction (Venue and Third Party)	\$1,220
Operations Spending	\$1,440
Tourism	\$463
Sponsors	\$90
Security	\$356
Total	\$3,569

Sources of Economic Impact

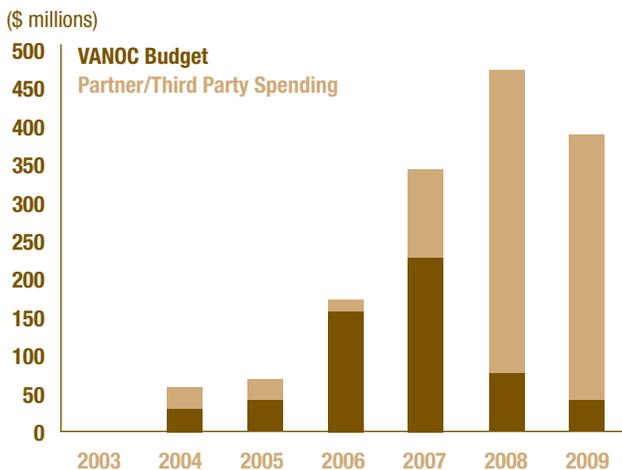
Economic impacts from the 2010 Winter Games arose from a variety of sources and from both publicly funded and privately funded spending. This section details the input spending used in our estimate of economic impacts attributable to the 2010 Winter Games from 2003 through March 2010.

Funded Venue Construction

The total VANOC budget for Games venue construction was approximately \$600 million. The majority of venue construction was funded by the Government of Canada and the Province of British Columbia with some additional investment by BC Housing and minor value-in-kind contribution from VANOC's operating budget.

In addition to the venue construction that was funded by the federal and provincial governments, VANOC partnered with municipalities and others in financing some venue development. These projects, like the Richmond Olympic Oval, were generally projects where a VANOC partner invested additional funds to make the venue into a lasting Olympic legacy. The Olympic and Paralympic Villages in Vancouver and Whistler were designed to house Olympic athletes during the Games and then be transformed into private real estate developments post-Games.

Figure 1: Timing of Venue Construction Activities



We have estimated total spending by VANOC partners and other third party investors to be \$1.22 billion. The majority of the third party spending is due to the City of Vancouver assuming responsibility for funding and completing the Vancouver Olympic Village.

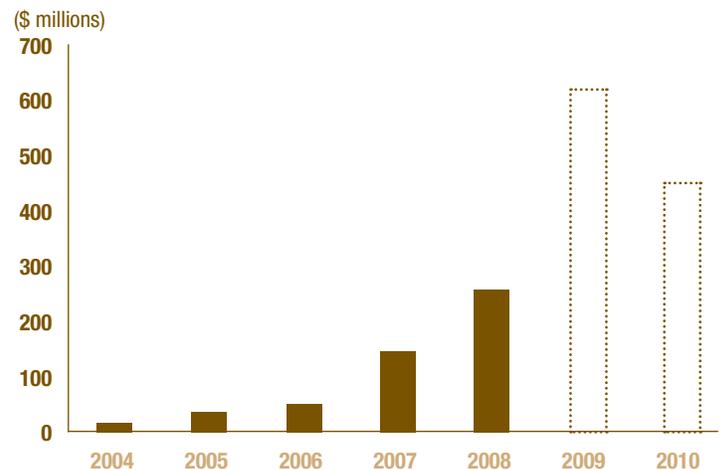
Figure 1 illustrates the estimated timing of all venue construction spending from 2003 to 2009.

VANOC Operational Expenditures

VANOC's total operating budget for the 2010 Winter Games is approximately \$1.76 billion. Figure 2 illustrates the timing of these expenditures.

VANOC financial statements covering the end of 2009 and the first quarter of 2010 are not yet available.

Figure 2: Timing of VANOC Operating Expenditures



Note: VANOC financial statements for calendar years 2009 and 2010 are not yet available.

2009 and 2010 calendar year expenditures have been estimated based on VANOC's updated budget.

Sources of Economic Impact

However, from prior financial reporting we know that through the first half of 2009, VANOC had spent roughly \$754 million or 45% of its operating budget. The composition of VANOC spending by category and the remaining budget to be spent in the second half of 2009 and the first half of 2010 are presented in Table 3.

As shown in Table 3, VANOC had budgeted spending of \$938 million for the first three quarters of its fiscal year 2010, which corresponds to August to December 2009 and the first four months of 2010.

Based on information from VANOC's business plan and budget, we have assumed that the remaining budget will be divided between 2009 and 2010 as illustrated in Figure 3.

It is worth noting that the allocation is only important to the relative timing of impacts but will not affect the cumulative impact of VANOC operations spending from 2003 to 2010.

While not all of VANOC's budgeted spending occurred in British Columbia, we noted that a significant portion was incurred within the province. According to data provided by VANOC, by March 2010 the organization issued a total of 6,689 contracts and purchase orders totalling \$1.6 billion. BC-based companies were awarded 4,700 contracts and purchase orders representing 70% of the total value or \$1.1 billion. Of the BC portion:

- Metro Vancouver businesses received contracts and purchase orders worth 68% of the total BC-based portion
- Businesses in the Sea-to-Sky Corridor received 17% of the total BC portion
- Businesses located in the balance of the province received contracts and purchase orders totaling 15% of the BC portion.

Through the 2010 Commerce Centre programs, the BC government was active in supporting BC companies to benefit from Games procurement. VANOC awarded clients of the 2010 Commerce Centre contracts and purchase orders valued at approximately \$532 million. A survey of 2010 Commerce Centre clients indicates that an additional \$120 million in business was done with other Olympic Games buyers.

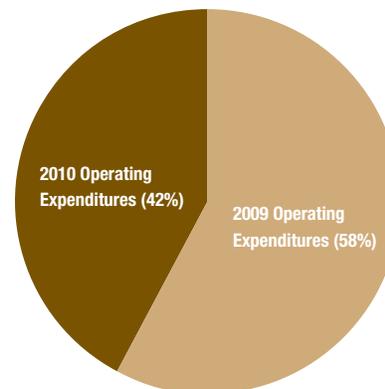
Table 3: VANOC Spending through July 2009

(\$ millions)

Category	Budgeted Amount	Spending through July 2009	Remaining budget to be spent in 2009 and 2010
Revenue, Marketing and Communications	\$170.4	\$72.2	\$98.2
Sports and Games Operations	\$247.0	\$130.5	\$116.5
Services and Games Operations	\$616.0	\$165.5	\$450.5
Technology	\$391.9	\$219.9	\$172.0
Workforce and Sustainability	\$140.2	\$81.5	\$58.7
Finance	\$126.6	\$84.7	\$41.9
Sub-Total	\$1,692.1	\$754.3	\$937.8
Contingency and Foreign Exchange Loss	\$63.8		
Total	\$1,755.9		

Source: VANOC

Figure 3: Allocation of VANOC's Remaining Operating Budget



Source: VANOC, PwC estimates

Tourism

As a large international event, the Winter Games is naturally a large tourism draw for the host country. Indeed, an estimated 325,000 people from BC, Canada and around the world came to Vancouver and Whistler in February. Roughly 270,000 were international tourists.

However, in terms of economic impact analysis, only incremental tourism spending is included. The tourism impact must be compared with a baseline estimate of tourism that would have occurred without the 2010 Winter Games. Figure 4 displays external visitors from January to March 2010 versus non-Games years.

Even in the shadow of economic hard times, the overall increase in visitors to BC in February 2010 was significant. As demonstrated by Figure 4, the 2010 Winter Games took place in the midst of a prolonged downward trend of visitors due to lingering effects of a global recession and a high Canadian dollar. Figure 4 illustrates that the 2010 Winter Games dramatically reversed these effects, if only temporarily.

In February 2010, hotels in Vancouver and Whistler experienced record occupancy rates. The reason for the substantial increase in hotel room nights sold and only a modest increase in the number of distinct individual travelers can be explained by the duration of stay.

In non-Games years, the average stay for visitors to BC has historically been approximately two nights. The average length of stay of visitors during the Games is estimated to be eight nights. Therefore, the amount of time spent in BC, and total spending in BC, was significantly higher during the Games even though the total number of visitors was not dramatically higher.

The impact of a longer length of stay is illustrated by total hotel room nights sold in British Columbia. In the absence of the 2010 Winter Games, we would have anticipated British Columbia to experience total room nights sold in the range of 1,360,000 to 1,500,000 for February 2010. Actual total room nights sold was higher at 1,660,000. This increase equates to an incremental impact in the range of 160,000 to 300,000 room nights.

Figure 5 plots the expected range for hotel room nights in British Columbia under the assumption Vancouver was not hosting the 2010 Winter Games against the actual number of room nights sold.

In the following sections, hotel revenue, retail sales, and restaurant receipt data for the first three months of 2010 are examined to draw out the incremental tourism impact induced by the 2010 Winter Games.

Figure 4: BC Non-Resident Tourism, January–March (2000–2010)

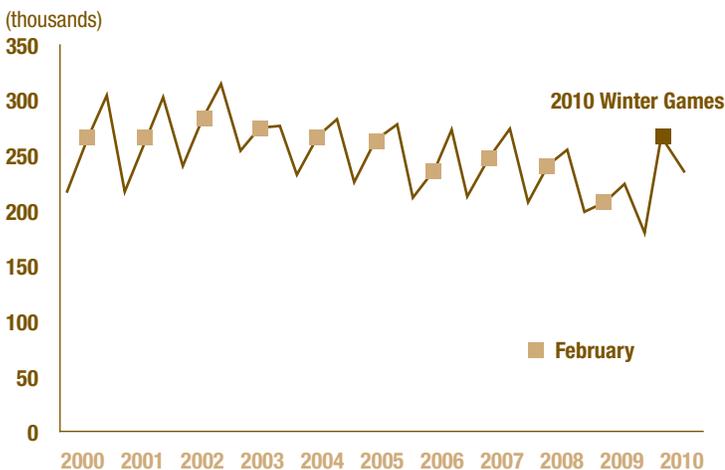
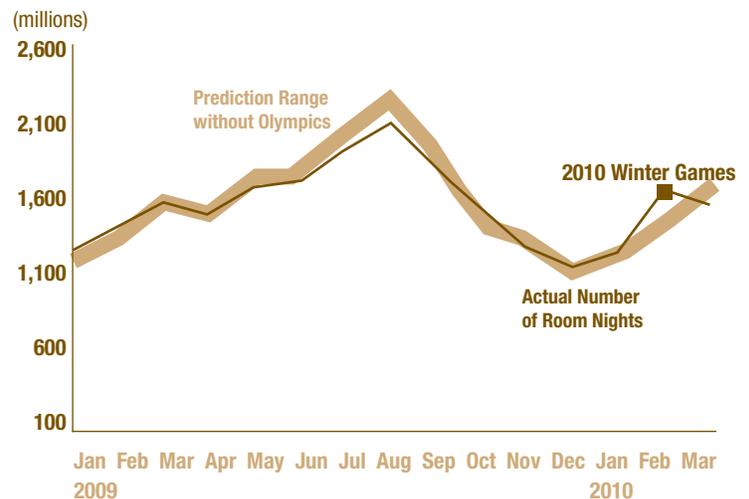


Figure 5: Total Room Nights Sold in BC





Accommodation Spending

Accommodation spending, as represented by hotel revenue in BC, increased dramatically in February 2010 with occupancy and average room rates in Vancouver and Whistler significantly higher than in non-Games years. Figures 6 through 9 plot average daily hotel rates and occupancy for January, February and March for 2009, 2010, and the average of the past six years.

As the figures show, Greater Vancouver hotels were able to charge higher than normal rates for the first three months of 2010, with February 2010 standing out for both rates and occupancy. However, as Whistler hotels typically experience room and occupancy rates close to the average rates from January to March, only February room rates and occupancy rates were above average during the 2010 Winter Games.

Figure 6: Whistler Hotels – Occupancy

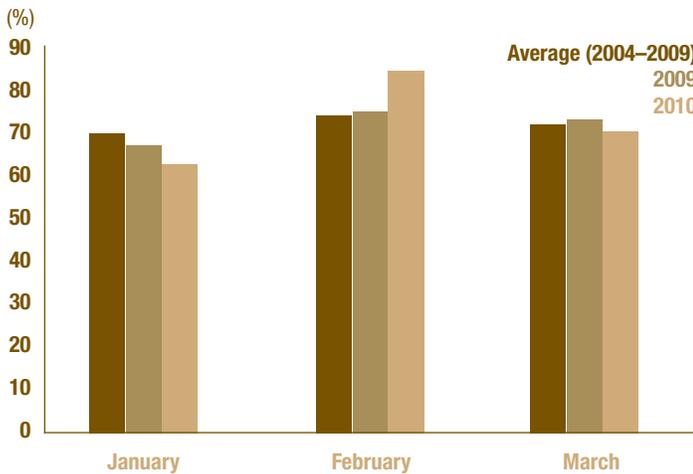


Figure 8: Whistler Hotels – ADR

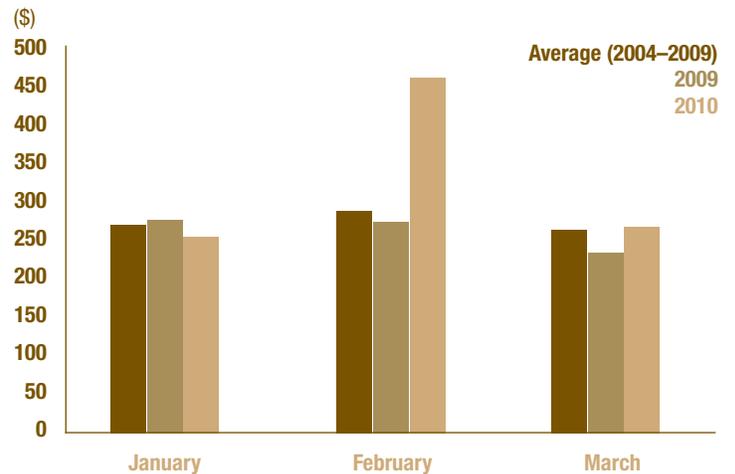


Figure 7: Greater Vancouver Hotels – Occupancy

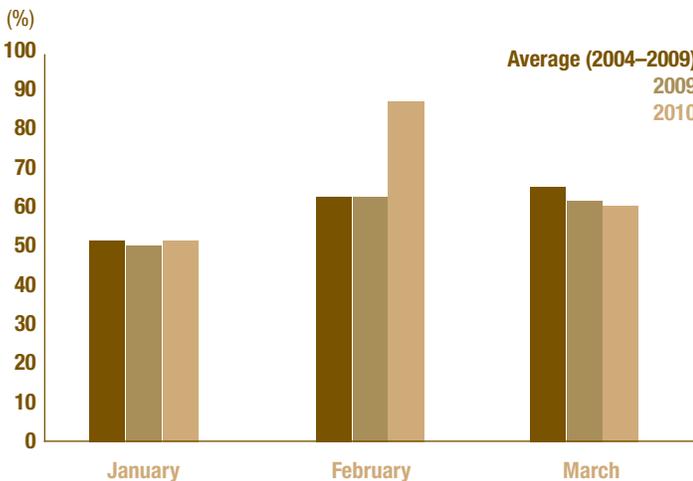
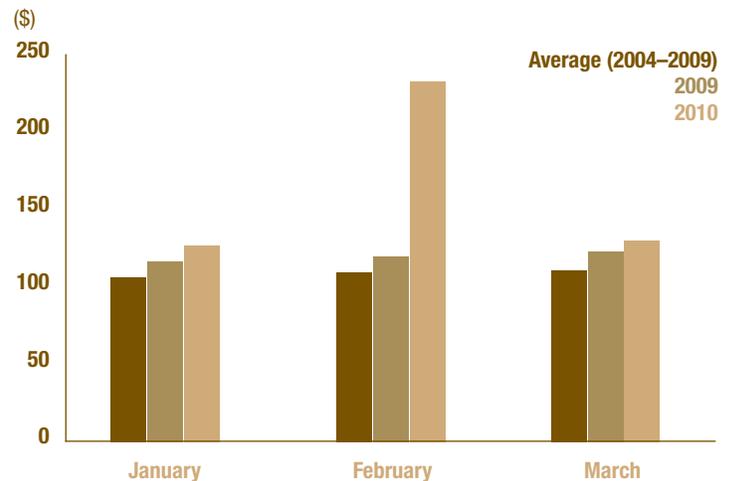


Figure 9: Greater Vancouver Hotels – ADR



Source: PKF Consulting Inc.

Sources of Economic Impact

Examining BC-wide hotel revenue data for the first three months of 2010, we have estimated that the 2010 Winter Games created an incremental impact of \$130 million. That is, hotel revenues in BC were roughly \$130 million higher than would be expected for an average first quarter of the year. Figure 10 indicates the increase in hotel revenues experienced in the first quarter of 2010 relative to the ten-year trend.

Retail Spending and Restaurant Receipts

Revenues at food services and drinking places realized a significant gain in the first quarter of 2010. Data from BC Stats shows that revenue for BC food services and drinking places was approximately \$1.9 billion in the first three months of 2010, or about \$129 million higher than an average first quarter over the past three years. Figure 11 compares inflation adjusted food services and drinking places in the first quarter of each of the past 10 years.

In addition, retail sales, particularly for food and beverage and clothing stores, also realized a material gain during February 2010. Overall, approximately \$100 million in incremental retail sales in BC was realized in the first quarter of 2010 due to the Games.

Incremental visitor spending on transportation and recreation is estimated to be approximately \$95 million.

Total incremental tourism spending is therefore estimated to be approximately \$455 million. Table 4 presents the estimated incremental tourism expenditure attributable to hosting the 2010 Winter Games. Estimates are from January 1, 2010 to March 31, 2010. It should be noted that these estimates also include spending by BC residents during this time period.

Table 4: Estimated Incremental Tourism Expenditure in BC: January 1, 2010 - March 31, 2010
(\$millions)

Hotel revenues	\$130
Retail Sales	\$230
Transportation	\$60
Recreation	\$35
Total	\$455

Figure 10: Inflation Adjusted Hotel Revenues, Q1 2000-2010

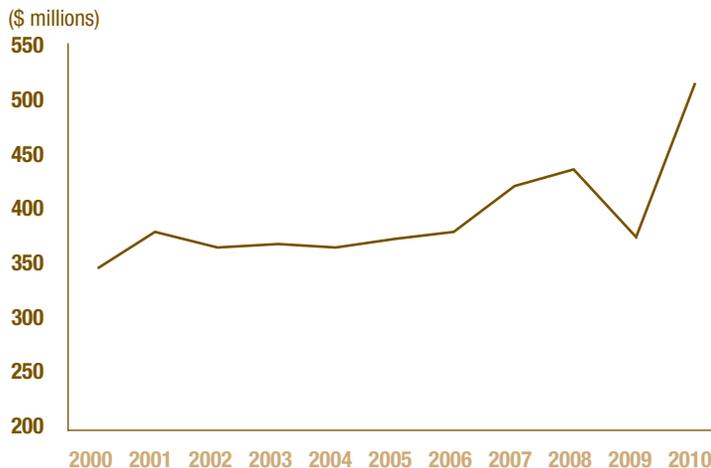
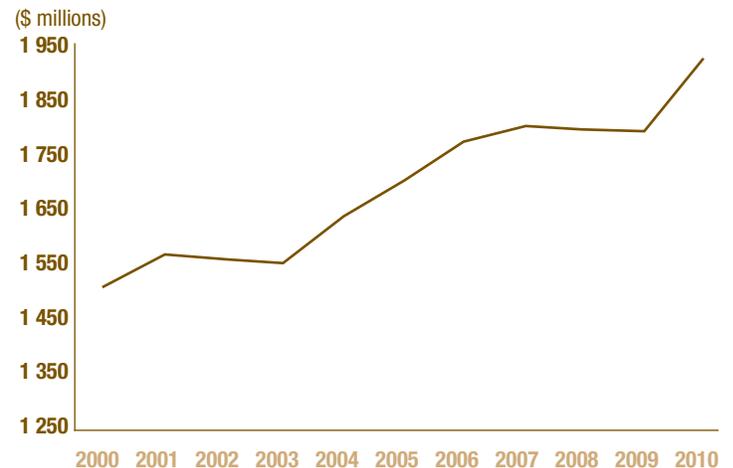


Figure 11: Inflation Adjusted Food Services and Drinking Places, Q1 2000-2010



Media

The 2010 Winter Games generated a substantial amount of media coverage reaching a potential audience of 3.8 billion people worldwide. The IOC reported that 235 broadcasters and television stations provided Games coverage in 220 territories worldwide.¹

Total 2010 Winter Games television broadcast hours were almost two times the coverage experienced during the 2006 Torino Winter Games and triple the coverage achieved by Salt Lake City in 2002.

Other forms of media such as the online Vancouver 2010 web site experienced 73.6 million unique visitors who viewed more than 1.2 billion pages of content and watched 38 million hours of on-line video during the Games.

Government of Canada

The largest component of Government of Canada funding for the 2010 Winter Games was the cost of making the Games secure.

The economic impact of federal security spending, particularly for British Columbia, is less clear than for other types of spending. The total security budget for 2009/10 and 2010/11 fiscal years is presented in Table 5.

As shown in Table 5, approximately half of the security cost is allocated to the RCMP/Integrated Security Unit (ISU) for the overall coordination and supply of security personnel including RCMP officers already serving in BC and temporary private security personnel hired specifically for the Games. The high-level composition of the RCMP portion of costs is as follows:²

- 36% towards personnel – including regular pay, secondment pay, overtime, and benefits
- 62% towards operations – including accommodation, meals, travel and fuel
- 2% towards capital expenditures – including radio communications equipment and vehicles

The budgeted amount for personnel includes items such as regular pay for current RCMP and municipal police personnel who would be paid regardless of the 2010 Winter Games and therefore should not be included in the economic impact of the Games.

The personnel budget also includes \$97 million paid to a consortium of three private security firms. Two of these firms are based in Canada (Alberta and Ontario) while the third is based in the United States. The firms were expected to provide temporary employment to approximately 5,000 British Columbians, and some portion of the private security expenditures did remain in BC through wages paid to these personnel.

Table 5: Winter Games Security Budget

Federal partner program activity	Federal Partner	Total Budget (\$ millions)	Spending Allocated to Fiscal 2010–2011 (\$ millions)
Protective policing services	RCMP	\$556	\$477
Conduct operations	Department of Defense	\$231	\$221
Intelligence program	Canadian Security and Intelligence Service	\$11	\$9
Emergency management and national security	Public Safety	\$1	\$1
A safe transportation system	Transportation Canada	\$34	\$15
Selection and processing of temporary residents	Citizenship and Immigration Canada	\$7	\$4
Provide access to the radio frequency spectrum	Industry Canada	\$10	\$7
Sustainable environmental health	Health Canada	–	\$2
Border security	CBSA	\$16	\$12
		\$866	\$748

Source: Treasury Board of Canada

1. Vancouver 2010 Olympic Winter Games, Global Television and Online Media Overview, 2010

2. Statement by Assistant Commission Bud Mercer, February 19, 2009 (based on spending of \$491.9 million versus Treasury Board submission of \$556 million)

Sources of Economic Impact

From the operations budget, approximately \$76 million was paid to Holland America Lines (based in Washington State) and Carnival Cruise Lines (based in Miami) for the use of three cruise ships for accommodation of RCMP personnel.

Excluding the wages paid to existing police and other security personnel as well as amounts paid to cruise ship operators, a conservative estimate, which excludes spending by the RCMP/ISU that may have had a direct and incremental GDP economic impact in BC, is approximately \$261 million.

The remaining, non-RCMP/ISU portion of the budget is largely composed of military and other security spending as well as some additional government spending. It is very difficult to assess the impact of this spending on BC without more detailed information. The total security budget impact on the Canadian economy will be addressed in a subsequent comprehensive report on 2010 Winter Games impacts.

Government of BC

The Government of BC has made a significant investment in the 2010 Winter Games. However, because incremental impacts are being reported, BC government spending is excluded from estimates of incremental economic impacts. The rationale for this approach is that this money would have or could have been spent by the government in an alternative way that may have generated similar impacts.

In addition to funding venue construction, the Province has used the 2010 Winter Games to leverage long-term economic impacts through a targeted business hosting program that ran through February 2010, as discussed in a subsequent section.

Other Provincial/Territorial and Foreign Governments

The 2010 Winter Games provided economic opportunities beyond BC's border. To capitalize on these opportunities, other provinces invested in their own pavilions and showcases in Vancouver and Whistler. Canadian pavilions at the Games included:

- Alberta House
- Atlantic Canada House
- Canada Pavilion
- Canada's Northern House (the Yukon, Northwest Territories, and Nunavut)
- CentrePlace Manitoba
- Four Host First Nations 2010 Aboriginal Pavilion
- French Quarter at Granville Island
- Maison du Quebec
- Ontario Pavilion
- Saskatchewan Pavilion

3. 2010 Aboriginal Pavilion Final Activity Report, Four Host First Nations, 2010

The 2010 Aboriginal Pavilion, the venue for the Four Host First Nations to showcase and host visitors during the Games period, had the following result:

- Hosted approximately 203,000 visitors at the 2010 Aboriginal Pavilion during the Games period averaging 9,662 visitors per day.
- Hosted over 670 performing artists and cultural groups from across Canada and internationally
- Generated \$250,000 in merchandise sales at the Pavilion site³

Moreover, as an international event, the 2010 Winter Games attracted spending by the governments of other major winter-sport nations like the Netherlands, Italy and Germany. This spending is generally directed towards setting up and operating a venue to support athletes to showcase a country's goods and to promote tourism and business relationships.

International pavilions operated during the Games included:

- Casa Italia (Italy)
- Korea House
- Czech Tourism Exhibition (Czech Republic)
- Sochi House (Russia)
- Saxony House (German)
- Slovak Representatives House (Slovakia)
- Holland Heineken House
- Ukraine House
- House of Switzerland
- USA House
- Japan House

Based on publicly available information, we have estimated that domestic and international government spending for pavilions and hospitality houses was \$90 million.

Other Private Company Spending

In addition to private spending by official sponsors, it is likely that other private companies increased their expenditures in preparation for hosting out-of-province clients or to showcase their goods to international visitors.

However, quantifying this type of spending would be speculative and, while private spending may have been substantial, it has been excluded from the economic impact analysis.

Regional Benefits

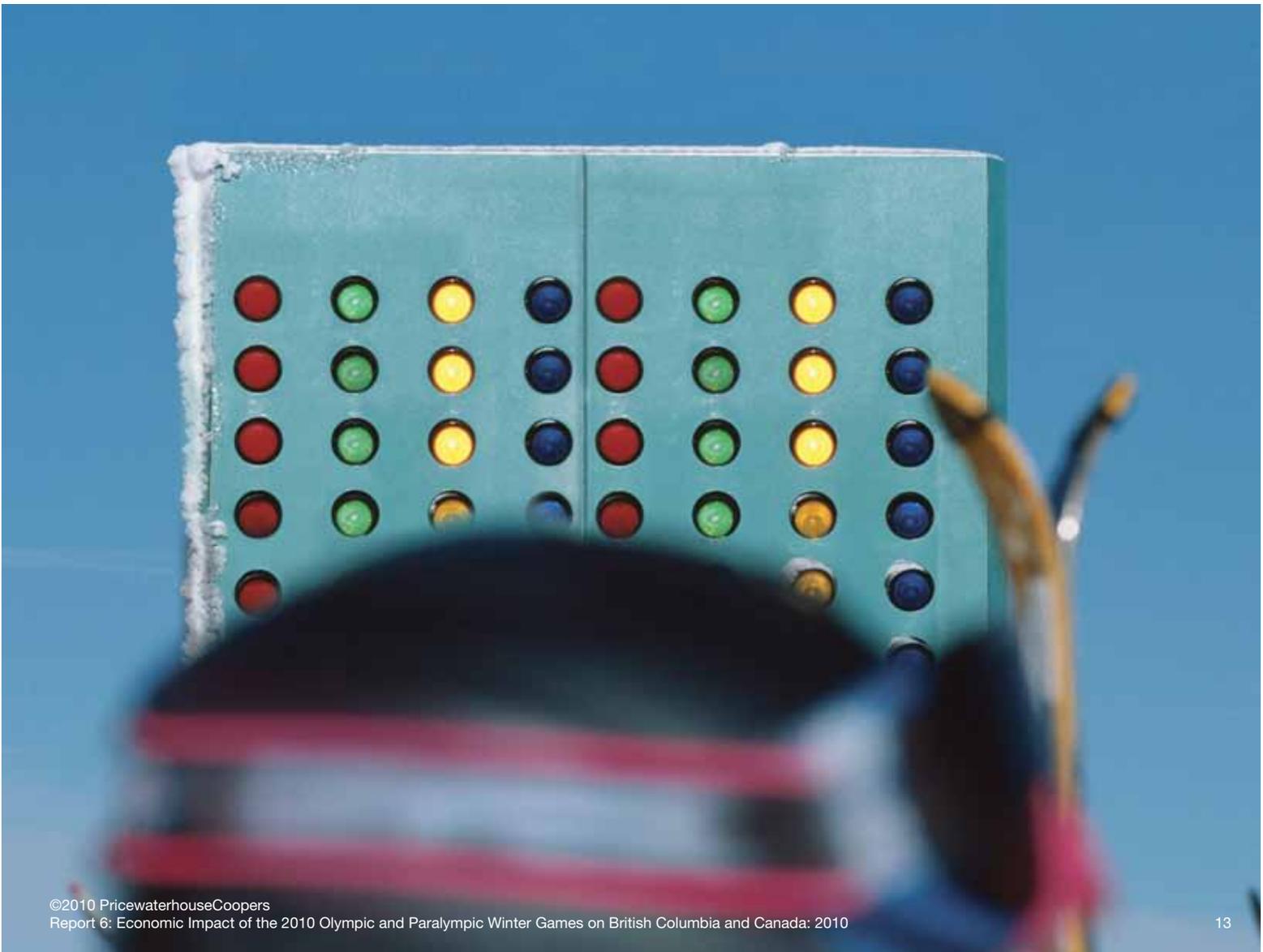
Hosting BC, a partnership of 2010 Legacies Now, Tourism BC, and the Ministry of Healthy Living and Sport, was created to increase the number of national and international sporting events hosted by communities throughout British Columbia. From 2004 to 2009, Hosting BC provided hosting grants of \$2.6 million to 34 communities and hosted 188 events. As a result, a number of communities were able to attract sporting events directly related to the 2010 Winter Games. A few examples of community sport hosting events follow.

The Comox Valley / Mt. Washington Alpine Resort hosted a variety of Olympic teams from diverse countries. In March 2009, Mt. Washington

hosted the cross country and biathlon world cup finals. Teams from Europe, North America and Asia competed in this International Paralympic Committee (IPC) event involving more than 100 athletes.

In 2009, Prince George hosted the Road to the Roar, the 2009 pre-Trials curling competition where four Canadian teams were selected to compete to represent Canada at the 2010 Winter Games.

Training camps for the Russian figure skating and Japanese speed skating teams were held at the Abbotsford Recreation Centre in 2010. Community benefits included access for residents to view training sessions and opportunities to interact with athletes at special events.



Pre-2010 Winter Games and Post-2010 Winter Games Economic Impacts

The following sections discuss the economic impact of the 2010 Winter Games by phase, from the pre-games phase (2003 to 2009), the Games year (2010), and the post-Games phase (beyond 2010). Figure 12 shows the composition of real GDP impacts estimated by PwC.

Pre-Games Economic Impacts – 2003 to 2009

The majority of pre-Games economic impacts resulted from venue construction and VANOC operations spending. The economic impact from venue construction may have been initially mitigated due to a booming construction sector from 2003 to 2008. It did provide significant temporary stimulus to the BC economy in 2009. However, as the economy fell into a serious recession, significant economic slack opened up.

Similarly, VANOC operations spending made a significant economic contribution during the pre-Games phase, particularly in 2008 and 2009.

Including VANOC and third-party spending, total pre-Games phase economic impacts were estimated at approximately \$1.3 billion in real GDP and 30,580 jobs.

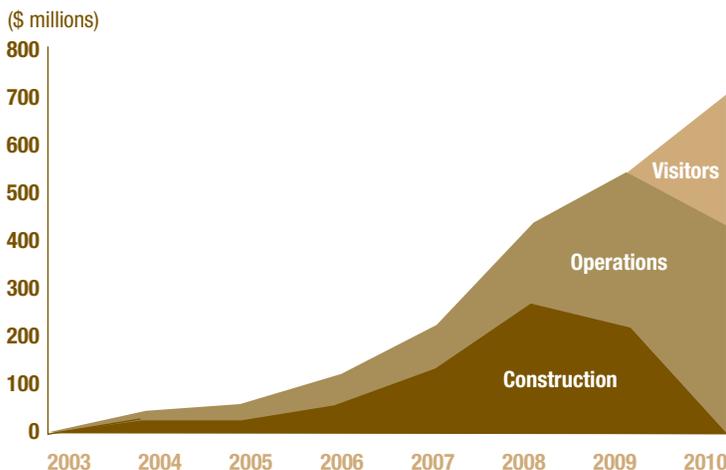
Games Year Impacts, 2010

Economic impacts during the first three months of 2010 are derived from VANOC operations spending (including security costs) and an influx of tourism into the province. The estimated economic impact through the first three months of 2010 is \$862 million in real GDP and 17,000 jobs generated or supported. Although these estimates cover only three months of activity in 2010, the employment supported by Games-induced spending should be considered as a full-year impact.

Post-Games Impacts – Beyond 2010

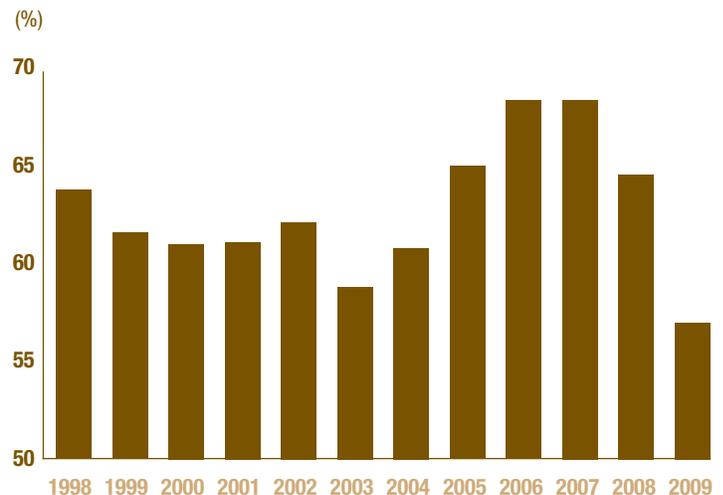
Post-Games economic impacts arise from the potential for a sustained increase in tourism due to the exposure provided by the 2010 Winter Games and from programs implemented to leverage trade and investment relationships. In the following sections, the trade and investment and tourism legacy of past host cities is discussed with an outline as to the potential for post-Games impacts for BC.

Figure 12: Composition of PwC Estimated Real GDP Impacts, 2003–March 31, 2010



Note: Operations category includes security costs

Figure 13: Hotel Occupancy Rate in Utah Pre and Post-2002 Winter Games



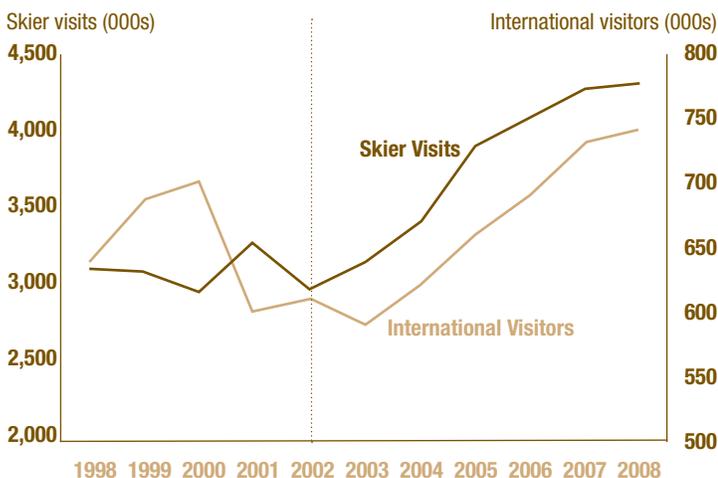
Source: http://travel.utah.gov/research_and_planning/visitor_statistics/2009yearendstats.html

Post-Games Business Development

The leveraging of federal, provincial, and private sector partnerships was evident in a variety of business hosting programs held during the Games. Over the course of the Games, federal government departments, provincial ministries, Olympic secretariats and a municipally-led initiative each hosted a variety of local, national, and international business leaders. Business representatives invited to participate in the business hosting programs were from a range of industry sectors, covering tourism, transportation, energy, technology, energy, entertainment, and media, among others.

The hosting programs created face-to-face connections between carefully selected senior business decision makers from a wide range of industry sectors world-wide and key government and business leaders from British Columbia. These business connections represent the initial step in a process of relationship building and due diligence which can lead to new investments, increased exports and new partnerships for BC businesses.

Figure 14: Skier Visits and International Visitation to Utah, Pre and Post-2002 Winter Games



Source: Utah Office of Tourism

4. European Tour Operators Association, "Olympic Report," July 2006

5. Sydney's squandering of Olympic spoils leaves tourism to count the cost, *The Australian*, August 28, 2010.

6. *Ibid.*

While it is too early to quantify the economic impact of the Provincial hosting program, an initial canvas of participating BC companies, local government and industry associations indicate that many participants are optimistic about the potential of these newly developed relationships. The full measure of the economic impacts of the hosting program will not be seen until 2011 and beyond, when new investment, employment, and export impacts provide measurable outcomes. Until then, the number and potential outcome of business opportunities reported at the end of 2010 will provide a preliminary assessment of the program.

Post-Games Tourism Legacy

While it is clear that the 2010 Winter Games clearly had a positive and substantial economic impact on tourism in the early months of 2010, the long-term impact of the Games on tourism will become evident over time.

The record for post-Olympic tourism has been mixed. Summer Games host cities such as Barcelona have realized some increase in tourism from hosting the Games. In other cities, however, such as Sydney, hopes of a post-Games tourism boom have not materialized. In the case of Sydney, external events such as a stronger local currency, the global financial crisis, 9/11, swine flu and SARS have affected what otherwise was considered to be a model post-Games tourism strategy.⁴ More recently, the lack of investment in convention facilities and other tourism infrastructure has been cited as contributing to the lackluster trend in tourism.⁵

Perhaps the best example of capitalizing on the tourism enhancing potential of the Games is with Salt Lake City and the state of Utah. The figures below present hotel occupancy rates, international visitors, and skier visits in Utah before and after the 2002 Winter Games.

The success realized of post-Games tourism in Utah can be partially attributed partially to a general economic recovery and strong ski seasons but also to the aggressiveness with which a post-Games tourism legacy was pursued in Utah. Indeed, the state's tourism marketing budgets increased over ten-fold from 2002 to 2006.⁶

Given the mixed success of prior host cities, a positive post-tourism impact will require a coordinated, and immediate effort to leverage the Games.

Trade and Investment Impacts

In addition to potential long-term impacts from a sustained increase in tourism, the 2010 Winter Games provided BC and other Canadian businesses with an opportunity to enhance their global reputation through the use of the Olympic Games brand. The Games also allowed the public and private sectors to discuss initiatives for trade cooperation and possible partnering arrangements with foreign investors.

Evidence from past Olympic Games has shown that hosting can have significant positive trade impacts.⁷ However, the magnitude and significance of trade impacts differ between Summer and Winter Games, with larger impacts occurring in Summer Games host cities. This result is not surprising since the Summer Games are much larger events and have a broader constituency of participating nations.

However, examining the pre and post-Games export growth of recent Winter Games host cities shows that exports tend to grow faster post-Games than in the pre-Games period. The state of Utah in particular enjoyed significant new export growth after the Salt Lake City Games.

Table 6 presents export performance for four previous Winter Games hosts in the pre-Games, Games year, and post-Games periods.

Actual post-Games export and investment attraction performance will ultimately be a function of the success of government Games-related trade and investment initiatives. To that end, during the 2010 Winter Games, the federal, provincial and municipal governments implemented business hosting programs targeted at showcasing Canadian goods and facilitating relationships between investors and Canadian businesses.

While some opportunities from these hosting programs may arise within weeks or months of the hosting event, other larger and more complicated opportunities may take months or even years before successful outcomes can be reported.

Post games impacts are expected to be experienced in tourism, with an increased number of visitors expected to travel to British Columbia.

Table 6: Export Growth in Previous Winter Games Host Cities – Pre and Post-Games

Region (Games)	Average Nominal Export Growth (%)		
	5-Years Pre-Games	Games Year	5-Years Post-Games
Alberta (Calgary '88)	1	10	9
Utah (Salt Lake '02) ¹	6	30	12
Piedmont (Torino '06) ²	1	9	4
Norway (Liljhammer '94) ³	8	5	8
BC (Vancouver/Whistler '10)	4	N/A	N/A

Notes:

1. Export data for Utah only available for 3 years pre-Games.
2. Data for the Piedmont region of Italy only available for 2 years post-Games.
3. Norwegian national exports used for comparative purposes.

7. Andrew K. Rose and Mark M. Spiegel, "The Olympic Effect," NBER Working Paper 14854, April 2009

Summary

In this report, we have estimated the economic impact of the 2010 Winter Games through March 31, 2010. Because some data from external parties has not been finalized, our results are preliminary and subject to change. The midpoint for the range of real GDP impacts from 2003 to March 31, 2010 is estimated to be \$2.3 billion (\$2002).

An estimated 325,000 visitors came to British Columbia during the 2010 Winter Games, of which approximately 270,000 were international visitors. From 2003 to March 31, 2010, incremental tourism and related spending from hosting the Games was estimated at \$463 million.

In addition to the incremental economic impacts, BC was able to leverage the Games through global media exposure. An audience of 3.8 billion people in 220 territories experienced broadcast coverage of the 2010 Winter Games. Leveraging the increased awareness resulting from media exposure will support BC's post-Games initiatives in trade and investment and in attracting tourism.

While some benefits from these hosting programs may arise within weeks or months of the hosting event, other larger and more complicated opportunities may take months or even years before successful outcomes can be reported.

Post-games impacts are expected to be experienced in tourism, with an increased number of visitors expected to travel to British Columbia. A positive post-games tourism impact will likely require a concentrated and coordinated immediate effort to leverage the Games.



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