Review of Estimates Related to Vancouver’s Bid to Stage the 2010 Olympic Winter Games and Paralympic Winter Games
Dear Sir:

I have the honour to transmit herewith to the Legislative Assembly of British Columbia my 2002/03 Report 6: Review of Estimates Related to Vancouver’s Bid to Stage the 2010 Olympic Winter Games and Paralympic Winter Games.

Wayne Strelloff, CA  
Auditor General  

Victoria, British Columbia  
January 2003  

copy: Mr. E. George MacMinn, Q.C.  
Clerk of the Legislative Assembly
Table of Contents

Auditor General’s Comments ................................................. 1

Introduction ................................................................. 9

The Bid Corporation’s Revenue and Expense Estimates ........... 13

Estimates of the Province's Financial Undertaking ............... 37

Response from the Vancouver 2010 Bid Corporation .............. 51

Response from the Province of British Columbia ................. 55

Appendices

A Office of the Auditor General: Risk Auditing Objectives and Methodology . . .63

B Office of the Auditor General: 2002/03 Reports Issued to Date ............. 69
In the summer of 2002, Vancouver was selected as one of the bid finalists to host the 2010 Winter Olympic and Paralympic Winter Games. As winning the bid could place a significant demand on the financial resources of the Province, my Office decided to examine the financial implications of this decision. Concurrently, the Vancouver 2010 Bid Corporation and senior government officials asked us to conduct a review of their work. We were pleased to accept this request, as doing so would give the Legislative Assembly and the public a more complete report.

In our review of the work of both the Bid Corporation and the Province, we examined the processes used to develop the estimates, the assumptions underlying those estimates and the plans for managing the risks associated with the planning and staging of the Games. We did not examine the financial operations of the Bid Corporation or the Government of Canada’s commitments to the Games bid.

The content of this report is based on information provided by officials of the Bid Corporation and the Province. Overall, we believe this report will help British Columbians understand Vancouver’s bid and the Province’s financial undertaking, and establish a clear baseline against which the Province’s undertaking and any future spending on the Games can be assessed.

The Bid Corporation is responsible for estimating the cost of meeting the operating and capital requirements specified by the International Olympic Committee (IOC), and the Games-related revenues that will fund these costs. It has developed a set of Bid Estimates: a budget and plan for delivering what the IOC requires from an Olympic organizer. If Vancouver wins, the Bid Corporation will be dissolved and a new organization, the Organizing Committee for the Olympic Games (OCOG), will be formed and serve as the Olympic organizer.

The Province is responsible for estimating and paying for most Olympic-related costs that the IOC does not assign to the OCOG. These responsibilities include medical and security costs, and costs seen as necessary to win the Olympic bid, such as upgrading the Sea-to-Sky Highway. The Province expects the Games will stimulate economic activity and resulting increases in tax revenues will help pay for its Games-related costs.
The Province is the sole guarantor of the Games. This is an important commitment. Predicting costs, revenues and economic conditions seven years into the future is inherently difficult and imprecise. To protect the Games, the IOC requires a guarantee that unforeseen costs will be covered. The Province is making that guarantee. Any cost increases or revenue shortfalls the OCOG cannot control—arising from inflation, interest or exchange rate fluctuations, the state of the economy, world threat levels, weather events and so on—are a financial responsibility of the Province.

The Bid Corporation’s approach to preparing the Bid Estimates is reasonable

We examined the processes used to develop the Bid Corporation’s estimates, and found nothing significant to lead us to conclude they are not reasonable. The Corporation’s approach to preparing these Bid Estimates was organized and made good use of the expertise of its staff, volunteers and consultants, and of information from the IOC and past Games. We also concluded the key assumptions made by the Bid Corporation to develop its estimates are plausible for the purpose of meeting IOC specifications.

Achieving the financial results predicted by the Bid Corporation will need excellent management, effective marketing, and a favourable economy

The Bid Corporation’s cost estimates were developed based on the assumption all aspects of the Games would be well managed. Good management is, of course, desirable for any undertaking. For the successful delivery of a cost-effective Games, it is vital.

Estimating revenue is not an easy task, given the inherent variability of many of the revenue sources. Obtaining the estimated levels of revenues provided through the IOC—broadcasting and international sponsorship—is essentially outside the OCOG’s control. And, achieving some other revenue goals—for example, for Canadian sponsorship—will need a favourable economy and a very good marketing program.
The Province’s approach to preparing estimates for major Games-related costs is reasonable

We found the Province used reasonable methods to determine the major Games-related costs to which it is contributing—namely, the Sea-to-Sky Highway upgrade and the provision of medical and security services for the Games. As well, we consider the assumptions used are plausible, except the assumption medical and security costs will not be affected by inflation.

As with the Bid Corporation’s cost estimates, the estimate for the Sea-to-Sky Highway upgrade has been developed on the assumption project delivery will be professionally managed. This estimate has also been carefully pared down, and is achievable only if no additions are made to the project’s scope.

The Province’s costs shown in this report do not include those related to an expanded Vancouver Trade and Convention Centre or a new rapid transit link from the Vancouver Airport to downtown. The Trade and Convention Centre would be useful to Games organizers, but not essential—in fact the Bid Corporation has developed a budget and plan for an alternative location for the media centre. The rapid transit link is not necessary for transporting people during the Games, and may not be ready in time for them.

Obtaining the predicted economic impacts will require extensive tourism marketing

Studies commissioned by the Province predict the 2010 Games could generate significant economic activity. The prediction methods used in these studies are, in our view, reasonable, and the assumptions plausible. However, as the studies indicate, the economic impact scenarios with the biggest payoffs will require an exemplary tourism marketing program both before and after the Games for the whole of British Columbia (in addition to the Games marketing planned for by the Bid Corporation).

The Province’s contingency needs continuing attention

The Province has guaranteed to the IOC and others (including the City of Vancouver) it will cover any unforeseen costs of the Games. It is providing for this obligation by including a $139 million contingency in its budget. We are concerned this contingency
allowance may not be sufficient to cover the many possible cost increases or revenue decreases that could affect the Games between now and 2010.

Even at the present time it appears much of the contingency allowance could be used up by inflation and unplanned costs. For example, following IOC requirements, the estimates for Games operations, Games capital, medical and security costs, and Games revenues, are priced in today’s dollars, even though most expenditures will be made up to seven years from now. Many economic forecasters are assuming 2% annual inflation during that period. The Bid Corporation, using a similar assumption, has estimated inflation could add $40 million to the capital cost of the Games. A similar effect on operating costs is plausible, although it could be offset to a certain extent by inflation-generated increases in revenue.

If Vancouver is selected, the Province will make a substantial investment in the Games

As indicated in the table below, the estimated minimum cost related to putting on the 2010 Olympic Winter Games and Paralympic Winter Games, including the costs covered by Games operating revenues, is $2,892 million.

The Bid Corporation estimates the OCOG can deliver the Games at a total operating cost of $1,354 million. It estimates that the OCOG will be able to cover these costs through revenue from staging the Games and grants (totalling $40 million) from the governments of British Columbia and Canada towards the incremental cost of the Paralympic Winter Games. The Bid Corporation estimates that OCOG’s capital needs can be met for a total cost of $620 million; the governments of British Columbia and Canada have each agreed to pay $310 million towards these capital costs.

The minimum cost the Province will bear to deliver the Games, including the cost of the Sea-to-Sky Highway upgrade, is estimated to be $1,248 million. This amount includes the Province’s contingency provision and its contributions towards the OCOG capital and operating costs mentioned above. It does not include any financing costs.
The Province’s economic impact studies estimate that the Games could, over the next 12 to 17 years, generate incremental provincial Gross Domestic Product increases of $2.0 billion to $4.2 billion, and incremental provincial tax revenue increases of $214 million to $538 million.

Readers should be aware that all of these estimates are future-oriented; actual results achieved will vary from estimates, and the variations may be material.
There are three key areas I suggest the Province should watch

As mentioned earlier, we found the processes used to develop the above estimates to be reasonable. We also found that achieving these expected results will not be automatic. If Vancouver is chosen to stage the 2010 Games, the Province should focus its attention in three areas:

**Ensure exemplary management**

The estimates we examined were developed based on the assumption that all aspects of the Games would be well managed. For example, the capital cost estimates are predicated on, and budget for, each project having a professional project management staff exercising tight control. The Province should therefore ensure such best-practices management (and effective public reporting of its delivery) is put in place.

**Pay careful attention to the management of contingencies**

The estimates for the Games’ operating and capital costs, and for the Sea-to-Sky Highway upgrade, include allowances for contingencies. These contingencies are a carefully-developed part of an estimate of the most likely cost of putting on the Games, and reflect the considered judgement of the experts who prepared the estimates. The use and control of contingencies is an important project management tool, and regular review of changes in contingencies can give sponsoring bodies important information on how well projects are being managed.

As mentioned above, the Province has also set up an overall contingency. Because the Province is the ultimate guarantor of the Games, scrutiny of the use made of the Province’s contingency can give periodic “snapshots” of the progress of the Games.

Accordingly, the Province should pay careful attention to the management of contingencies.

**Pay careful attention to revenue and economic impacts**

Games revenues are inherently variable, and require careful attention. In particular, the estimates for Canadian sponsorship, donations and other revenue are challenging goals; attaining them will need a favourable economy and an exemplary marketing program for the Games. And, as the Province’s studies indicate,
the economic impact scenarios with the biggest payoffs presume an equally exemplary tourism marketing program for the whole of British Columbia. The Province should ensure that the resources, management and marketing skills needed to achieve its revenue and economic impact targets are put in place.

I am pleased that the Bid Corporation’s staff, and the teams estimating the Province’s Games-related costs, gave my staff their full cooperation and made good use of any suggestions for improvement we offered.

If Vancouver is successful in its bid for the 2010 Winter Olympic and Paralympic Games, I intend to carry out additional reviews.

Many of my staff have contributed to the preparation of this report, in particular:

Kathy Crawley
Endre Dolhai
Jean Gordon
Peter Gregory
Russ Jones
Don Kelso
Ken Lane
Deborah Law
Anne McLeod
Lisa Moore
Molly Pearce
Bruce Perry

Ken Ryan-Lloyd
Debbie Sawin
Laurie Selwood
Hemendra Shah
John Sitch
Owen Trist
Mary Virtue
Pat Wilkes
I would also like to thank Canadian Heritage for loaning us Matthew Parker from Consulting & Audit Canada to help in our work.
What the Games will entail

Vancouver is one of three candidate cities vying to host the 2010 Olympic Winter Games and Paralympic Winter Games (together here referred to as the Games). It proposes to stage the Games from February 5 to 21, 2010. The Games will include biathlon, bobsledding, cross-country skiing, curling, figure skating, freestyle skiing, ice hockey, luge, Nordic combined, skeleton, ski jumping, snowboarding, speed skating, short track speed skating and alpine skiing. Sports venues will be located in the Vancouver and Whistler areas, with the main Olympic athletes village being in Vancouver and the second village in Whistler. Opening and closing ceremonies will be staged in BC Place Stadium.

The Paralympic Games will run from March 5 to 14, 2010, and include alpine skiing, biathlon, cross-country skiing, ice sledge hockey and wheelchair curling. All events will be held in Whistler except the opening ceremonies, which will also be staged in BC Place Stadium.

We reviewed estimates of the Bid Corporation’s costs and revenues and of the Province’s financial undertaking, including related economic impacts.

If Vancouver’s bid for the Games is successful, the Province will be required to invest significant public resources, and may have to commit additional resources through guarantees. Given the significance of these, we decided to review the reasonableness of the Province’s cost estimates to undertake the Games, and of predictions of the economic impacts expected to flow from the Games. The Vancouver 2010 Bid Corporation—the body that prepared the Bid Estimates submitted to the International Olympic Committee (IOC) on January 10, 2003—and senior government officials also asked us to conduct a review of their work.

Our reviews were performed in accordance with assurance standards recommended by the Canadian Institute of Chartered Accountants, and were carried out from September to December 2002. Through enquiry, discussion and analysis we examined the processes used to develop the estimates, the assumptions underlying those estimates, and the processes used to identify and develop plans for managing the risks associated with the planning and staging of the Games. We did not examine the financial
operations of the Vancouver 2010 Bid Corporation, or the Government of Canada’s commitments regarding the Games bid.

We interviewed staff of the Bid Corporation, Olympic Bid Secretariat (Ministry of Community, Aboriginal and Women’s Services), and Treasury Board Staff (Ministry of Finance) and members of working groups that assisted the Bid Corporation in preparing its estimates. Also, we reviewed:

- estimates prepared by the Vancouver 2010 Bid Corporation for the revenues, operating costs and venue capital costs of the Games;
- the budgets for such items as security, medical and capital infrastructure essential to Vancouver being named the host city; and
- the potential financial exposure of the Province resulting from the Olympics-related guarantees provided and agreements entered into by the Province.

When necessary, we hired consultants to assist us on technical matters pertinent to our reviews.

Being chosen as host city for an Olympic Games is a three-stage process

The Olympic Games are the exclusive property of the IOC, which exercises its rights in all aspects relating to the Games from the beginning (how a city applies) to the end (the definition, and final disposition, of any earned surplus or deficit).

There are three stages a city must go through to host an Olympic Games: nomination by the country’s national Olympic committee; submission of a winning bid to the IOC; and the planning and holding of the Games. As Exhibit 1 shows, each stage is managed by a different entity.

In 1998, the Canadian Olympic Committee began a search for a Canadian city to host the 2010 Games. The Vancouver/Whistler 2010 Bid Society, formed by local business leaders with corporate and government partners, submitted a proposal and, in November of that year, Vancouver was selected to represent Canada in its bid for the Games. With that decision the work of the Society was done, and it was wound up.
Next, in June 1999, the Vancouver 2010 Bid Corporation was established to prepare Vancouver’s bid to host the 2010 Games. The Bid Corporation’s five “Member Partners” are the Province, the Government of Canada, the Canadian Olympic Committee, the City of Vancouver, and the Resort Municipality of Whistler.

As the first step in bidding, by May 31, 2002 each international contender had to submit a “Mini-bid book,” in IOC-specified format, outlining its concept for the Games. After evaluating all submissions, the IOC announced on August 29, 2002, that Vancouver—along with Berne, Switzerland; Salzburg, Austria; and Pyeongchang, South Korea—was short-listed. (Berne subsequently withdrew its application, leaving three cities in the running.) Each short-listed city then had to prepare Bid Estimates, a detailed master plan for hosting the Games. Our review focuses on this stage of the process.
On July 2, 2003, the host city for the Games will be chosen. If Vancouver is selected, the Bid Corporation will be dissolved and a new body, the Vancouver Organizing Committee for the Olympic Games (OCOG), will take over responsibility for delivering the Games.

Although the Bid Corporation and the Province have worked closely together on the bid, the costs and risks they face are quite different. For this reason, we have structured the rest of the report into two parts. In the first, we discuss the estimates that the Bid Corporation has prepared in accordance with the IOC’s requirements. In the second, we discuss the Province’s cost estimates, the guarantees it has given, and the possible economic impacts of the Games.
Conclusions:

Nothing significant has come to our attention that would lead us to conclude the revenue and expense estimates presented in the Bid Corporation’s Bid Estimates are not reasonable for the purposes intended.

The Bid Corporation’s approach to preparing these estimates was organized, and made good use of the expertise of its staff, volunteers and consultants, and of information from the IOC and past Games.

The Bid Corporation made certain key assumptions to develop its estimates. We concluded these assumptions are plausible for the purpose of preparing an estimate to IOC specifications.

However, it is important to recognize that revenue estimates are likely to be more variable than expense estimates, and that achieving some of the Bid Corporation’s revenue targets will require a favourable economy and effective marketing.

In the rest of this section, we give more details on the Bid Corporation’s:

- general assumptions;
- revenue estimates;
- operating expense estimates; and
- capital cost estimates.

Note on dollar amounts:
In summary tables of revenue and expense in this section, figures are shown in US$ to match the required presentation in the Bid Estimates, as well as in their Canadian equivalents. In the text, US$ are noted as such; otherwise, amounts shown are in Canadian funds.
General assumptions:
the IOC specifies the form and content of the Bid Estimates book, and most of the assumptions used in preparing the estimates

As required by the IOC, the Bid Estimates book Vancouver submitted answers some 200 required questions, and provides over 120 required assurances on matters ranging from the Olympic Charter to financial guarantees for any shortfall of the Games.

The IOC specifies what kinds of costs it considers to be related to the Games and the responsibility of Games organizers, and what kinds are not. It also dictates that all Bid Estimates must follow its detailed specifications. For example, Games costs and revenues must be estimated as if they were being paid out or earned today. As well, all budget amounts must be expressed in 2002 US dollars. (To do this, Vancouver’s bid used an exchange rate US$1.00 = CAD$1.55.) Other significant budget assumptions provided by the IOC are shown in Exhibit 2.

The Bid Corporation is assuming it will have approximately 18,000 volunteers available for the Olympic Games and 4,000 for the Paralympics.

Exhibit 2

Significant assumptions provided by the IOC and used by the Bid Corporation

| Sports: | The programme of sports included in the Games is based on that for the 2006 Winter Olympic Games. |
| Athletes and officials: | There will be 3,750 athletes and officials for the Olympics and 1,700 for the Paralympics. |
| Duration: | Services are to be available to athletes and officials for the eight days before the opening ceremonies, during the 17 days of the Games, and for three days after the closing ceremonies. (For the Paralympics, these will be seven, 10 and three days, respectively.) |
| Cash basis: | Estimates are to be prepared on a cash basis; the value of contributed goods and services is to be estimated as if they had to be purchased today. |

Source: Compiled by the Office of the Auditor General of British Columbia
The Bid Corporation also had to make assumptions (Exhibit 3) about the effect of various provincial and federal taxes on its estimates (underlying many of these is the assumption the OCOG will be a non-profit organization under Part II of the Canada Corporations Act).

The Bid Estimates include donated goods and services

Olympic Games sponsors often provide “value-in-kind”—goods or services—as part of their sponsorship contribution. For example, the Bid Corporation’s estimate includes $100 million-worth of value-in-kind in the technology and telecommunications costs, and the IOC has indicated that, of the potential “TOP” (international) sponsorship revenue, 40% should be considered as value-in-kind.

In preparing its estimates, the Bid Corporation normally values goods and services to be received as if they are purchased on the open market in 2002. However, value-in-kind is accounted for—as both revenue and expenditure—at the price set by the contributor, which is often full retail price and not necessarily the price a large organization with a well-organized purchasing function would pay.

### Exhibit 3

Assumptions about taxes in the Bid Estimates

<table>
<thead>
<tr>
<th>Source: Compiled by the Office of the Auditor General of British Columbia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Provincial Sales Tax (PST):</strong> PST has been included in the Bid Estimates.</td>
</tr>
<tr>
<td><strong>Goods and Services Tax (GST):</strong> Bid Corporation expects OCOG to be able to recover 90% or more of the GST it pays, and has reflected this in the Bid Estimates.</td>
</tr>
<tr>
<td><strong>Withholding tax:</strong> The Bid Estimates do not include an allowance for withholding tax, as the Government of Canada has said revenue earned by the IOC will be exempt from such tax.</td>
</tr>
<tr>
<td><strong>Customs duties and excise tax:</strong> No allowance for customs duties and excise tax has been included in the Bid Estimates, as the Government of Canada will grant relief from custom duties, excise taxes and GST on goods imported into or exported out of Canada for the Games, such as personal effects, gifts, awards, display goods and equipment.</td>
</tr>
</tbody>
</table>
If a need that was originally expected to be met through purchase is now being met through value-in-kind, the budgeted cost of meeting that need may increase. However, both expenditures and revenues will increase proportionately, even though the quantity of goods and services consumed—and the net surplus or deficit of the Games—will be substantially unchanged.

Revenue estimates: revenue estimating methods are reasonable, and assumptions are plausible for the purpose of preparing an estimate to IOC specifications, but some revenue targets may prove challenging to meet.

Estimating revenue is difficult because it requires making many judgements about future events and circumstances that cannot be accurately predicted at this time. The result is uncertainty and variability in the estimates, a problem that can become worse as the forecast period lengthens. Recognizing these difficulties, we concluded the Bid Corporation’s processes for developing its revenue estimates (see Exhibit 4) are reasonable, and the assumptions used are plausible.

We also concluded that some revenue targets—in particular, local sponsorship, donations, and other revenue—will require favourable circumstances and effective marketing if they are to be met. This combination of inherent variability and challenging revenue targets means revenues are a high-risk part of the Bid Estimates.

The Bid Corporation has plans for mitigating specific aspects of the risks around revenue. It plans to use hedging contracts to minimize foreign exchange risk. Also, it has budgeted for insurance to cover any act of nature (such as fog or a mudslide) that forces cancellation or re-scheduling of an event. This insurance would protect against losses from reduced broadcast revenue or from ticket refunds arising directly from an act of nature. However, we noted the budget does not include a separate reserve for any revenue deficiency. Bid Corporation staff believe that the contingency in the Games expenditure budget would also cover any revenue shortfall, should one occur. We believe that although this contingency may be adequate to cover expense variability, it may not cover revenue shortfalls as well.
The estimate for broadcast rights revenue is based on the IOC’s advice

The IOC is the exclusive owner of audio-visual and multimedia rights to the Olympic Games. It sells these rights to broadcasters around the world for a fee, then shares part of the fee with host cities staging winter or summer Games.

For budgeting purposes, the IOC has instructed all candidate cities contending for the 2010 Winter Games to assume that US$400 million will be their share of the broadcasting fee. The Bid Corporation discounted this amount appropriately, also as instructed, to arrive at its budget estimate in 2002 dollars of US$348 million ($540 million).

The IOC has cautioned that the US$400 million is not a guarantee or obligation on the part of the IOC, but “simply a forecast of the potential contribution.” Business conditions at the

Exhibit 4

Revenue budget included in the Bid Estimates

Figures as shown in the Bid Estimates (US$) and their Canadian equivalents

<table>
<thead>
<tr>
<th>Source</th>
<th>(US $ millions)</th>
<th>($) millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>IOC contribution (broadcast rights)</td>
<td>348</td>
<td>540</td>
</tr>
<tr>
<td>Local (Canadian) sponsorship, including official suppliers</td>
<td>293</td>
<td>454</td>
</tr>
<tr>
<td>Ticket sales</td>
<td>141</td>
<td>218</td>
</tr>
<tr>
<td>International (”TOP”) sponsorship</td>
<td>85</td>
<td>131</td>
</tr>
<tr>
<td>Other</td>
<td>79</td>
<td>124</td>
</tr>
<tr>
<td></td>
<td><strong>946</strong></td>
<td><strong>1,467</strong></td>
</tr>
<tr>
<td>Government subsidy for Paralympics</td>
<td>26</td>
<td>40</td>
</tr>
<tr>
<td><strong>Total revenue</strong></td>
<td><strong>972</strong></td>
<td><strong>1,507</strong></td>
</tr>
<tr>
<td>Paid to IOC and Canadian Olympic Committee for royalties and marketing rights</td>
<td>(98)</td>
<td>(153)</td>
</tr>
<tr>
<td><strong>Net revenue</strong></td>
<td><strong>874</strong></td>
<td><strong>1,354</strong></td>
</tr>
</tbody>
</table>

Source: Compiled by the Office of the Auditor General of British Columbia from the Bid Estimates of the Vancouver 2010 Bid Corporation
time when new broadcast agreements are negotiated (between 2003 and 2006), and the long-term business outlook at the time of negotiations, will be key in determining how much broadcasting companies are willing to pay.

The broadcasting fee has increased significantly over the history of the Games, and this upward trend has continued (although at a slower pace) for the Athens 2004, Torino 2006 and Beijing 2008 Games. The IOC’s estimate for the 2010 Games in effect assumes no growth in IOC broadcast receipts after 2008.

The IOC has also cautioned candidate cities that the 49% share of the broadcast rights fee currently allocated to the host city for the 2010 Games can be varied at the discretion of the IOC. (For example, the ratio allocated to Olympic host cities was reduced from 60% to 49% after the 2002 Salt Lake City Games.)

Achieving the local (Canadian) sponsorship revenue target will require a favourable economy, strong sponsorship support, and an effective marketing strategy

The “local” sponsorship program will grant Canadian marketing rights to sponsors for different periods between 2005 and 2012 in return for cash and value-in-kind contributions. Unlike the “TOP” program (see below), which is international in its reach and managed by the IOC, the local sponsorship program operates within the host country and is managed by the host city’s OCOG.

The Bid Corporation’s local sponsorship revenue target is $454 million. It is based on a conceptual marketing proposal outlining who the potential sponsors might be for the 2010 Games, how many there might be, and what they might contribute. To develop this estimate, the Bid Corporation consulted with national and international experts in Olympic and sports marketing. As well, several of the corporation’s own staff, who have extensive experience in sports marketing and fundraising, analyzed sponsorship data from past major sporting events, including Olympic Games.

However, as noted in a 2002 report by a consulting firm engaged by the Bid Corporation, there are risks in using data from...
past Games to make revenue projections. Countries can differ in their local economy, population size, cultural background, level of sports enthusiasm, and popularity and past successes of local athletes. This may partly explain the wide range in local sponsorship in the past—for example (all in US$), from Calgary 1988, $70 million; Nagano 1998, $163 million; Sydney 2000, $492 million; and Salt Lake City 2002, $875 million. (These gross receipts are reduced by payments to each country’s national Olympic committee, which apparently have ranged from tens of millions of US dollars to—for Sydney and Salt Lake City—several hundreds of millions.)

Whether the sponsorship revenue target of $454 million (US$293 million) will be achieved cannot be predicted with confidence at this time. For example, one key assumption is that several corporations will be prepared to pay significant asking prices for sponsorship. However, the ability and willingness of Canadian businesses to become sponsors depends greatly on the state of Canadian business, notably in 2005 and 2006.

Another assumption is existing product categories will continue to be available for local sponsorship. This may not hold true if the IOC moves some product categories to the “TOP” program, as it has done in the past. For instance, loss of the brewery or automobile categories could reduce local sponsorship revenue greatly. Industry convergence could also reduce the number of industry or product categories, or the number of companies available for sponsorship. And, competition for sponsorship support is mounting and many events today are facing declining sponsorship revenue.

Bid Corporation acknowledged to us that its local sponsorship revenue estimate is greatly increased in size over revenues generated by past major events in Canada or by the Canadian Olympic Committee. Nevertheless, because the Olympic brand is exclusive and valuable, they believe the revenue goal is achievable—given a favourable economy, strong sponsorship support and effective marketing.
The ticket sales estimate was developed based on trends from previous winter Olympics and on unique local factors.

Ticket revenue will be received from the Game’s opening ceremonies, closing ceremonies, daily medal ceremonies, cultural events, and about 80 sports events during the Games. The Bid Corporation has estimated ticket sales revenue at $218 million.

Its ticketing revenue model classifies each day of competition by the sports and the sessions held on that day, then considers a range of factors: the venue capacity, the prices, the timing of sessions, the number of seats set aside for the Olympic Family, the requirements of the host broadcaster, and the public interest in each sport.

Vancouver’s revenue estimate is based on selling more tickets than either of the two previous winter Games, because its venues are larger and it plans to sell tickets to the medal ceremonies separately. The ticket prices for premium events are generally higher than the local market is used to, based on the IOC view that the Games are a once-in-a-lifetime event.

Internal reviews were undertaken to refine the assumptions about ticket prices and utilization rates. The Bid Corporation used trends from the previous two winter Games (notably, Salt Lake City) as a guideline to establish seat prices and utilization rates in the model. Both the model and its assumptions were reviewed by external experts in event ticketing and marketing.

The estimate for revenue from international (“TOP”) sponsorship is also based on the IOC’s advice.

The TOP (The Olympic Partners) program is a worldwide sponsorship program managed by the IOC. It is aimed at a few large international corporations that have long supported the Olympic movement. Under the program, the IOC grants exclusive worldwide marketing rights to a product category in return for financial and value-in-kind contributions from TOP partners. These contributions are shared among the IOC, host cities for the winter and summer Games, and other Olympic organizations.
As it did with broadcast rights, the IOC has told candidate cities what to assume will be their share of TOP sponsorship revenue—in this case, US$100 million. The Bid Corporation, following IOC instructions, has discounted this amount to arrive at its TOP estimate of US$85 million ($131 million).

Again, the IOC cautions the US$100 million is a forecast, not a guarantee. Sponsorship negotiations for most product categories for the 2009–2012 Games cycle are not expected to be concluded until 2007 or 2008. In addition, there are other uncertainties. For example, the number of product categories or of companies within a category may change, business conditions may deteriorate, or sponsor willingness to pay high fees may ebb if the reputation of the Olympics were to be damaged.

Furthermore, the IOC could change either the 50% share of the gross TOP sponsorship fee it currently allocates to host cities, or the traditional allocation of two-thirds of that host cities’ share to the summer host and one-third to the winter host.

However, the IOC has historically been able to negotiate increasingly higher fees since the TOP sponsorship program started in 1985. The last cycle for which revenue statistics are publicly reported, covering 2001–2004, shows the total TOP fee expected for this period (gross amount before any allocation by the IOC) to be US$600 million—about a US$50 million increase over the immediately preceding cycle. This increase reflects a marked slowdown in the historical growth pattern. In arriving at the US$100 million estimate for the 2010 Games, the IOC has in effect assumed no growth in the gross amount of the TOP sponsorship fee after the 2001–2004 cycle.

Other revenues include some projections that are not yet supported by appropriate plans and marketing schemes.

The Bid Corporation is estimating some $124 million of revenues from a variety of other sources. These include licensing ($38 million), donations from businesses and individuals ($20 million), proceeds from sale of assets at the end of the Games ($10 million), cost recovery charges for providing accommodation and other services to media and sponsors, and entrance fees to test events before the Games.
Licensing revenue is generated by granting licences to businesses to sell merchandise such as t-shirts, pins, toys and other souvenirs, and from the sale of Olympic coins. To develop its estimate for this revenue, Bid Corporation staff analyzed revenue data from recent major sporting events, including the Olympic Games. They also consulted with people involved with the Salt Lake City Games. They found that factors critical to the success of a licensing program are a strong tourism market, appealing product designs, and good distribution network.

Unlike licensing, some other revenue sources such as donations are only proposals. A further $28 million of other revenue is a projection of revenue sources yet to be fully identified or properly defined. As such, these amounts are not supported by assumptions that can be assessed for reasonableness at this time. The Bid Corporation believes that, once the Games are awarded, the Vancouver OCOG will have the time and resources to develop appropriate plans, campaigns and marketing schemes to generate these revenues.

Operating expense estimates: the process for estimating operating expenses is reasonable, and the assumptions are plausible for the purpose of preparing an estimate to IOC specifications

The IOC requires each bidding city to prepare a detailed estimate of operating expenditures for the Games. These include all the costs that would be incurred to host the event, from planning to staging to final clean-up at the end. Not included here are expenditures of a permanent nature, such as for newly constructed facilities, which are discussed later in this section.

The estimates must be prepared in a specified way, which the IOC details in a number of documents, such as the draft Host City Contract, the Manual for Candidate Cities for the XXI Olympic Games 2010, and the Media Guide for Broadcasting.

Financial staff of the Bid Corporation began work on the operating expenditure estimates (see Exhibit 5) by gathering information on past Games, visiting the 2002 Salt Lake City Winter Games venues, and being briefed by key Salt Lake City
### Exhibit 5

**Operating expenditures budget included in the Bid Estimates**

Figures as shown in the Bid Estimates (US$) and their Canadian equivalents

<table>
<thead>
<tr>
<th>Item</th>
<th>(US $ millions)</th>
<th>($ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Games workforce</strong></td>
<td>149</td>
<td>231</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td>135</td>
<td>209</td>
</tr>
<tr>
<td><strong>Sports venues and operations</strong></td>
<td>105</td>
<td>163</td>
</tr>
<tr>
<td><strong>Administration</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>includes office rent, furniture and equipment rental, insurance, legal, audit, translation and interpretation</td>
<td>80</td>
<td>124</td>
</tr>
<tr>
<td><strong>International Broadcast Centre</strong></td>
<td>78</td>
<td>121</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>includes a $90 million project contingency</td>
<td>65</td>
<td>100</td>
</tr>
<tr>
<td><strong>Transport</strong></td>
<td>56</td>
<td>87</td>
</tr>
<tr>
<td><strong>Ceremonies and culture</strong></td>
<td>55</td>
<td>85</td>
</tr>
<tr>
<td><strong>Telecommunications</strong></td>
<td>40</td>
<td>62</td>
</tr>
<tr>
<td><strong>Advertising and promotion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>advertising and promoting the Games, publishing event brochures and beautifying the city</td>
<td>33</td>
<td>52</td>
</tr>
<tr>
<td><strong>Paralympic Games</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>incremental costs not incurred for the Olympics</td>
<td>28</td>
<td>43</td>
</tr>
<tr>
<td><strong>Olympic villages</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>fit-out and operations of athletes villages in Vancouver and Whistler</td>
<td>13</td>
<td>21</td>
</tr>
<tr>
<td><strong>Pre-Olympic events and co-ordination</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>attending and learning from Games prior to the 2010 Games, and testing sporting facilities</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td><strong>Catering</strong></td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td><strong>Main Press Centre</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>fit-out, administrative support and operations of the press centre</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td><strong>Internet</strong></td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td><strong>Medical</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>doping control and administration of medical facilities</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td><strong>Security</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>accreditation badges and private security contractors at the venues prior to the Games</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Net operating costs</strong></td>
<td><strong>874</strong></td>
<td><strong>1,354</strong></td>
</tr>
<tr>
<td><strong>Paid to IOC and Canadian Olympic Committee for royalties and marketing rights</strong></td>
<td><strong>98</strong></td>
<td><strong>153</strong></td>
</tr>
<tr>
<td><strong>Total operating costs</strong></td>
<td><strong>972</strong></td>
<td><strong>1,507</strong></td>
</tr>
</tbody>
</table>

Source: Compiled by the Office of the Auditor General of British Columbia from the Bid Estimates of the Vancouver 2010 Bid Corporation
Games finance staff. Next, with the assistance of consultants, they established departments and divided preparation of the estimate into workable sections. Each department included experts in fields specific to the budget items and, when necessary, consultants were engaged to assist in the process. As well, key members of the departments attended information sessions presented by the IOC, and by the chief financial officer of the Salt Lake City Games.

Meetings between the finance team and the departments were held frequently to address issues as they arose, and to inform all parties about the status of work, budget assumptions, and IOC requirements. The finance team reviewed estimates as they were developed to ensure their reasonableness, search for missing details, and remove any duplicated budget items. Two senior Bid Corporation staff and a consultant performed a final review of the estimate for completeness and reasonableness.

We concluded that the processes used to develop the expenditure estimates are reasonable, and the assumptions used are plausible. The nature of many of these costs is indicated in Exhibit 5. In the paragraphs that follow we give more information about several of the larger or more complex cost items.

Games workforce is the largest single item in operating expenditures

At the height of the Games there will be approximately 4,500 OCOG employees (most of them temporary) and 18,000 volunteers. Whether employees or volunteers are recording the finances of the Games, maintaining traffic flow, or updating websites, the costs of their labour are included in “Games workforce” (see Exhibit 6). (Not included in this line item are costs of contracted service providers such as bus drivers or caterers.)

This estimate was prepared by a team that included two experienced human resource managers. They used Salt Lake City workforce information, adjusted based on the advice of Salt Lake City staff. The workforce requirements were then reviewed and adjusted by individual departments. A salary grid, based on information from Salt Lake City, Statistics Canada and Canadian businesses, was then applied to the workforce requirements. Ultimately, workforce costs were brought back together as one budget item, and reviewed by two senior staff of the Bid Corporation and a consultant.
Technology—information management and communication tools—is critical to the success of the Games

Reliable technology and telecommunications are needed to ensure that Games information is readily available to the IOC, broadcasters, sports federations, media, OCOG staff and the general public. Detailed estimates of these costs were developed with the assistance of technical consultants from industry, transfer of knowledge from the Salt Lake City Games and advice from the IOC.

A significant portion ($91 million) of the “technology” line item (see Exhibit 7) relates to one major IOC-negotiated contract for systems management, programming, specialized software, and systems integration. Hardware such as printers, computers and servers, as well as the fees of information technology consultants,

**Exhibit 6**

Games workforce

<table>
<thead>
<tr>
<th>Item</th>
<th>$ millions</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff expenditures (includes salaries and benefits)</td>
<td>210</td>
<td>91</td>
</tr>
<tr>
<td>Volunteer expenditures (includes uniforms, training, and incentives)</td>
<td>21</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>231</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Compiled by the Office of the Auditor General of British Columbia from information provided by the Vancouver 2010 Bid Corporation

**Exhibit 7**

Technology, telecommunications and Internet

<table>
<thead>
<tr>
<th>Item</th>
<th>$ millions</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>209</td>
<td>76</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>62</td>
<td>22</td>
</tr>
<tr>
<td>Internet</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>276</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Compiled by the Office of the Auditor General of British Columbia from information provided by the Vancouver 2010 Bid Corporation
make up 66% of the “technology” line item. Equipment and systems
to time and score competitions, compute results and feed them
to real-time information systems, such as scoreboards and data
displays, make up another 24%. Printing and imaging services
for newspapers and broadcasters make up 7% of the total; and
the remaining 3% is software systems for support functions such
as accounting and asset management.

“Telecommunications” includes equipment, cable and other
infrastructure and related services for broadcast operations, mobile
and fixed phones, fax, radios, and wireless devices.

“Sports venues and operations” covers the operation of sports facilities
used for the Games

Forty percent of sports venue costs of $163 million (see
Exhibit 8) are for “fit-out”—that is, all costs incurred to convert
a venue from its current state to that required for the Games and
then back to its original state. An example would be installing
temporary bleacher seating for spectators. Almost half of the fit-
out budget is for generators and cabling to ensure uninterrupted
electric power is provided while the Games are on.

Exhibit 8

Sports venues

<table>
<thead>
<tr>
<th>Item</th>
<th>$ millions</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fit-out</td>
<td>66</td>
<td>40</td>
</tr>
<tr>
<td>Rent</td>
<td>38</td>
<td>23</td>
</tr>
<tr>
<td>Operations</td>
<td>31</td>
<td>19</td>
</tr>
<tr>
<td>Clean-up</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>Support and administration</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>163</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Compiled by the Office of the Auditor General of British Columbia from information provided by the Vancouver 2010 Bid Corporation
“Rent” is an estimate of the cost of compensating the owners of the alpine skiing and snowboard venues for any lost income as a result of the Olympic Games using their facilities, and of renting one major facility (GM Place). For the compensation amount, the Bid Corporation and venue owners have a memorandum of understanding stating that actual compensation will be calculated by a not-yet-detailed method that compares earnings prior to the Games and during the Games.

The rent amount shown reflects the best estimate available at the time the Bid Estimates were completed (October and November of 2002). Since that time, negotiations about the Games use of GM Place have continued. The cost of using the facility will be determined in the future when ticket surcharges for building maintenance are finalized, and may be materially greater than the present rent estimate.

Major components of the remaining costs include field of play requirements, cleaning, snow removal, and crowd control.

During the planning of the sports venues, a team which included a consultant with many years of experience in fitting out venues ensured that IOC and international sport federation requirements were met. Each international sport federation has also given its approval of the plans for the venues to be used for its sport.

An International Broadcast Centre supporting a minimum of 7,000 broadcasters will provide worldwide live television coverage of the Games

The IOC recently decided that broadcast services at Olympic Games will be provided by an IOC-owned organization. The 2008 Summer Games will be the first trial of this new organizational model, and 2010 will be its first use in a Winter Olympics. The contract with the IOC’s broadcasting operation includes providing host broadcast coverage, and planning and operating the technical component of the broadcast centre. The Bid Corporation developed the International Broadcast Centre estimate (Exhibit 9) after consultation with Salt Lake City staff and with national broadcasting experts.
An extensive transportation system will be needed for the Games

The transportation budget is intended to meet the transportation needs of the Olympic Family, athletes, officials, media, volunteers, sponsors and spectators (Exhibit 10). Spectators and volunteers will make use of the extended public transit systems within Vancouver and Whistler; other groups will have dedicated transportation services.

The spectators system—the most elaborate—plans to make use of boats, trains and highway buses in addition to the existing Vancouver and Whistler transit systems. During the Games the plan calls for up to 1,000 buses, 16 boats, two trains, 600 vans and 2,000 other vehicles to be in use.

The transportation estimate also includes the costs of transporting athletes and officials from their home country to Vancouver and return, and shipping their sporting equipment.

The Bid Corporation developed its transportation estimate in consultation with local and international transportation organizations and experts.

Ceremonies and culture are an important part of the Olympic experience

The IOC requires that the OCOG include events for ceremonial, artistic and celebratory aspects of the Games, including opening and closing ceremonies, medal awards, team welcomes, and a cultural programme. As the IOC points out,

### Exhibit 9

<table>
<thead>
<tr>
<th>Item</th>
<th>$ millions</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Host broadcaster contract</td>
<td>105</td>
<td>87</td>
</tr>
<tr>
<td>Administration and management</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Operations</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Fit-out</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>121</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Compiled by the Office of the Auditor General of British Columbia from information provided by the Vancouver 2010 Bid Corporation
“this area represents the opportunity for the OCOG to showcase the host country’s artistic and cultural heritage.” A budget of $100 million was chosen: $85 million in “ceremonies and culture” (Exhibit 11) and $15 million in the Games workforce budget. A team with experience in planning ceremonies for a number of national and international sporting events developed a detailed

Exhibit 10

Transportation

<table>
<thead>
<tr>
<th>Item</th>
<th>$ millions</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spectators system</td>
<td>44</td>
<td>51</td>
</tr>
<tr>
<td>Planning, support and pre-Games</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>Athlete transport subsidy</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Athlete, arrival and departure and ceremonies systems</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Parking system</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Media systems</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>IOC Family system</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>87</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Compiled by the Office of the Auditor General of British Columbia from information provided by the Vancouver 2010 Bid Corporation

Exhibit 11

Ceremonies and culture

<table>
<thead>
<tr>
<th>Item</th>
<th>$ millions</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening and closing ceremonies</td>
<td>30</td>
<td>35</td>
</tr>
<tr>
<td>Torch relays</td>
<td>17</td>
<td>20</td>
</tr>
<tr>
<td>Olympiad festival</td>
<td>17</td>
<td>20</td>
</tr>
<tr>
<td>Olympic medal ceremonies</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Youth, education and Internet programs</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Administration, planning, fit-out, regional and supplemental ceremonies</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>85</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Compiled by the Office of the Auditor General of British Columbia from information provided by the Vancouver 2010 Bid Corporation
plan and budget for each presentation area within the $100 million envelope. There is allowance, however, for the OCOG to adjust the scope of the ceremonies, once it is known what funds will actually be available at the time of the Games.

The OCOG is also responsible for organizing the Paralympic Games

The budget (Exhibit 12) for the Paralympic Games includes costs directly attributable to the Paralympic Games as well as incremental costs for them over those costs to operate the Olympic Games. Estimates for the Paralympic Games were prepared by the same teams using the same processes and standards as for the Olympic Games.

Approximately 4,000 volunteers will assist in hosting the Paralympic Games, which will involve up to 800 athletes in five disciplines, 900 team officials, 100 technical officials and 800 accredited press personnel.

With the exception of the opening ceremonies, which will be held at BC Place Stadium in Vancouver, all events of the Paralympic Games will be held at venues in Whistler.

### Exhibit 12

**Paralympic Games**

<table>
<thead>
<tr>
<th>Item</th>
<th>$ millions</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadcasting and media</td>
<td>8</td>
<td>19</td>
</tr>
<tr>
<td>Human resources and administration</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>Ceremonies</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>Transportation</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>Advertising and promotion</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>Accommodation</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Sports venues</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Catering</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>43</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Compiled by the Office of the Auditor General of British Columbia from information provided by the Vancouver 2010 Bid Corporation
Capital cost estimates: the processes used to develop the capital estimates are reasonable, and the assumptions are plausible for the purpose of preparing an estimate to IOC specifications.

Under IOC requirements, an Olympic bid must provide a detailed budget for all capital expenditures on new or renovated sporting event venues, athletes villages, a main press centre and an international broadcast centre—that is, “all capital investments which will to a large degree remain in their actual state after the Games.” Exhibit 13 shows the location of these facilities.

The governments of Canada and British Columbia have agreed to provide $620 million ($310 million dollars each) to cover these capital costs. This consists of $110 million to be placed in an endowment fund to support ongoing operations at three venues (Callaghan Valley Nordic centre; Simon Fraser University speed skating oval; Whistler sliding centre); the remaining $510 million is to be used as shown in Exhibit 14.

The amount of $620 million for capital costs was the result of a very preliminary estimate by senior staff of the Bid Corporation. The corporation subsequently developed more precise estimates.
Exhibit 13

Location of Olympic Venues, Vancouver Area

Source: Compiled by the Office of the Auditor General of British Columbia from information provided by the Vancouver 2010 Bid Corporation
The Bid Corporation’s Revenue and Expense Estimates

Location of Olympic Venues, Whistler Area
### Exhibit 14

**Capital budget included in the Bid Estimates**  
Figures as shown in the Bid Estimates (US$) and their Canadian equivalents

<table>
<thead>
<tr>
<th>Project</th>
<th>(US $ millions)</th>
<th>($ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whistler (Callaghan Valley) Nordic centre:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nordic skiing, ski-jumping, Nordic combined, and biathlon (new)</td>
<td>66</td>
<td>102</td>
</tr>
<tr>
<td>Paralympic and regional facilities (grants toward development)</td>
<td>44</td>
<td>66</td>
</tr>
<tr>
<td>Simon Fraser University long-track speed skating oval (new)</td>
<td>41</td>
<td>64</td>
</tr>
<tr>
<td>Whistler Sliding Centre: bobsled/skeleton/luge (new)</td>
<td>35</td>
<td>55</td>
</tr>
<tr>
<td>Callaghan Valley (Whistler) athletes village and athletes centre (grant toward development)</td>
<td>29</td>
<td>46</td>
</tr>
<tr>
<td>University of British Columbia hockey rink (new)</td>
<td>23</td>
<td>36</td>
</tr>
<tr>
<td>False Creek (Vancouver) athletes village (grant towards development)</td>
<td>19</td>
<td>30</td>
</tr>
<tr>
<td>Hillcrest/Nat Bailey Stadium Park: curling rink (new)</td>
<td>18</td>
<td>28</td>
</tr>
<tr>
<td>Hastings Park: figure skating, short-track speed skating (renovation)</td>
<td>17</td>
<td>26</td>
</tr>
<tr>
<td>Whistler/Blackcomb: alpine skiing (renovation)</td>
<td>15</td>
<td>23</td>
</tr>
<tr>
<td>International broadcast centre (grant toward proposed Richmond convention centre)</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Cypress Mountain: snowboarding and freestyle skiing (renovation)</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>General Motors Place: hockey (renovation)</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Vancouver arena: ice hockey training (grant)</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total, new construction and renovation</strong></td>
<td><strong>329</strong></td>
<td><strong>510</strong></td>
</tr>
<tr>
<td>Legacy fund (endowment, revenue from which is to cover future operating losses of Nordic centre, speed skating oval, and sliding centre)</td>
<td>71</td>
<td>110</td>
</tr>
<tr>
<td><strong>Total capital cost</strong></td>
<td><strong>400</strong></td>
<td><strong>620</strong></td>
</tr>
<tr>
<td>Contribution from Government of Canada</td>
<td>200</td>
<td>310</td>
</tr>
<tr>
<td>Contribution from Government of British Columbia</td>
<td>200</td>
<td>310</td>
</tr>
<tr>
<td><strong>400</strong></td>
<td><strong>620</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Compiled by the Office of the Auditor General of British Columbia from information provided by the Vancouver 2010 Bid Corporation*
for each capital project. This work was, in most cases, coordinated by construction specialists who volunteered their services to the Bid Corporation. They hired architects and engineers to develop a conceptual design for each project. Construction costs for each project were then estimated in two ways. One estimate was prepared by a firm of quantity surveyors (specialists in estimating construction costs) and the other by one of a number of construction companies with experience building similar projects. For the alpine skiing and snowboarding venues, the first estimates were prepared by the operators of the ski facilities. Finally, the Bid Corporation’s construction specialists compared the two estimates for each project and reconciled any differences.

Construction projects normally go through three design stages—conceptual, preliminary, and detailed, with the accuracy of cost estimates improving at each stage. All proposed Games projects are essentially still in the conceptual stage (although they are detailed enough to have received approval from the applicable international sporting federations). For some of the 2010 venues, the conceptual designs have been further refined in high-cost areas (for example, the design of the long-span roof on the speed skating oval at Simon Fraser University). No project has advanced completely to the preliminary design stage, let alone the detailed design stage at which the most accurate estimates are normally prepared. However, we understand that the Bid Corporation’s work has advanced at least as far as is customary in the bid phase of a Games.

Given the need to prepare as realistic an estimate as possible at such an early stage of design, we believe that the Bid Corporation’s estimating methods are reasonable. The assumptions used are plausible for the specific purpose of preparing an estimate to IOC specifications. (We discuss in the next section the effect preparing the estimates in 2002 dollars has on the Province.)
Conclusions:

Reasonable methods have been used to develop estimates for the major Olympic-related costs to which the Province is contributing—namely, the Sea-to-Sky Highway upgrade and the provision of medical and security services for the Games. The assumptions used are plausible, except for the treatment of inflation on medical and security costs. That assumption is one of several reasons why we are concerned that the contingency set aside to cover the many unknown costs for which the Province is responsible may not be sufficient.

Studies commissioned by the Province predict that the 2010 Games would generate significantly increased economic activity and tax revenues. The prediction methods used in these studies are reasonable and the assumptions are plausible. However, achieving the predicted positive impacts will require a very extensive provincial tourism marketing program (in addition to the marketing planned by the Bid Corporation).

The Province is an important guarantor and funder of the Olympic bid

The Province has committed to directly paying for some Olympic-related costs and to be guarantor of most other costs. It hopes to recover some of its costs through the Games’ stimulus of the British Columbia economy.

The IOC requires over 120 guarantees to be included in the Bid Estimates—from the federal government, the provincial government, the City of Vancouver, the Resort Municipality of Whistler, the Canadian Olympic Committee, and other entities providing support to the Games. The commitments range from letters of support to financial guarantees.

Although the Olympic Games must be awarded to a city, the IOC recognizes the often-limited financial resources of most candidates and requires guarantees from other “competent bodies or authorities”—which, in the case of Canada, means the federal and provincial governments.

For Vancouver’s bid, the Province will pay part of the cost of building the sports venues and Olympic villages, of operating certain venues after the Games, of providing security for the Games, and of providing medical services during the Games. The Province is
also committed to paying for and carrying out an important Games-related project, the Sea-to-Sky Highway upgrade (see Exhibits 15 and 16).

Exhibit 15

Sea-to-Sky Highway Upgrade

Source: Compiled by the Office of the Auditor General of British Columbia from information provided by the Vancouver 2010 Bid Corporation.
### Exhibit 16

The Province’s estimated Games-related costs

($ million)

<table>
<thead>
<tr>
<th>Expenditure</th>
<th>Known costs</th>
<th>Possible costs to Province, currently not quantifiable nor included in estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Approved funding envelope for the Games:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital: venue and village development, and endowment for continued venue operation</td>
<td>310</td>
<td>• OCOG operating and capital&lt;sup&gt;2&lt;/sup&gt; cost overruns above contingency, including those from inflation, unhedged foreign exchange losses and scope changes</td>
</tr>
<tr>
<td>Security</td>
<td>88</td>
<td>• OCOG uninsured revenue shortfalls</td>
</tr>
<tr>
<td>Contribution towards staging the Paralympics&lt;sup&gt;1, 4&lt;/sup&gt;</td>
<td>20</td>
<td>• medical and security cost overruns, including those from inflation, or because 2010 risk levels turn out to be higher than 2002 levels</td>
</tr>
<tr>
<td>Medical</td>
<td>13</td>
<td>• Compensation to Vancouver or Whistler for Games-related costs</td>
</tr>
<tr>
<td>Resort Municipality of Whistler land bank&lt;sup&gt;4&lt;/sup&gt;</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Grants to First Nations&lt;sup&gt;4&lt;/sup&gt;</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Sports development&lt;sup&gt;4&lt;/sup&gt;</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Contingency: available to cover possible costs currently not quantifiable, including inflation&lt;sup&gt;4&lt;/sup&gt;</td>
<td>139</td>
<td></td>
</tr>
<tr>
<td><strong>Total envelope</strong></td>
<td>600</td>
<td></td>
</tr>
<tr>
<td><strong>Other costs:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sea-to-Sky Highway improvement project</td>
<td>600</td>
<td>• Cost overruns above contingency</td>
</tr>
<tr>
<td>Games oversight agency</td>
<td>15</td>
<td>• Cost overruns</td>
</tr>
<tr>
<td>Callaghan Valley road</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Vancouver Downtown East Side improvements</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Funding for Bid Corporation’s operations</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>(includes Crown corporation contributions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Games-related provincial marketing program</td>
<td>To be determined</td>
<td></td>
</tr>
<tr>
<td>Marketing controls&lt;sup&gt;4&lt;/sup&gt;</td>
<td>To be determined</td>
<td></td>
</tr>
<tr>
<td><strong>Total&lt;sup&gt;6&lt;/sup&gt;</strong></td>
<td>1,248+</td>
<td></td>
</tr>
</tbody>
</table>

<sup>1</sup> Amounts reflected in Bid Corporation’s estimates.

<sup>2</sup> Discussions with the federal government have occurred about sharing in the cost of inflation-related capital cost overruns.

<sup>3</sup> Based on ongoing discussions between the federal and provincial governments, the budget assumption is that each will contribute $20 million towards the incremental cost of the Paralympic Winter Games.

<sup>4</sup> Amounts included in the Province’s initial contingency estimate of $189 million.

<sup>5</sup> The IOC requires the host city and organizing committee to ensure no other marketing programs in British Columbia, private or public, compete with the official Olympic marketing program (by, for example, implying a connection with the Games when they have not paid for the right to do so). The Province will incur a cost to buy up advertising rights on signs and billboards along highways leading to Olympic venues, to prevent their use for such “ambush marketing.”

<sup>6</sup> Does not include any borrowing costs for funds spent on Games.

Source: Compiled by the Office of the Auditor General of British Columbia
Beyond these known direct expenditures, the Province is also providing financial guarantees. The most significant are a guarantee to fund any shortfall in the Games operating budgets, and guarantees to the City of Vancouver and the Resort Municipality of Whistler for extra costs they incur because of the Games.

The Sea-to-Sky Highway upgrade is an important Games-related capital project of the Province

Each potential Olympic host city is required to identify which new capital projects, outside of those included in the Games budget, are necessary to the successful delivery of the Games. In Vancouver’s case, three capital projects, each with significant funding from the Province, were initially considered to be in this category: building the Richmond Light Rapid Transit link, expanding the Vancouver Trade and Convention Centre, and upgrading the Sea-to-Sky Highway.

A light rapid transit link connecting Richmond and Vancouver airport to downtown has been under consideration for several years, but is still only at the feasibility-study stage. There is no commitment to complete the project in time for the 2010 Games. Providing this new link is not required by the IOC, and the Province has stated that this is not an Olympic project and not essential to the success of the Olympic bid. Accordingly, we have not examined this project further.

Plans to carry out a major expansion to the Vancouver Trade and Convention Centre began in 1993. Negotiations were unsuccessful, so a revised plan was developed. Important questions of financing, ownership and management of this new plan are still under negotiation. A complete cost estimate has not yet been developed. Until recently, the project was estimated to cost $495 million, with the Province directly contributing $203 million and the Federal government matching that amount. The tourism industry was seen as contributing because the remainder of the funds would come from reallocation of a Provincial hotel tax that was formerly earmarked for tourism promotion. The Federal government is now proposing that the project be expanded so that it connects directly to the existing trade and convention centre. This expansion will raise the cost to about $550 million.
The Province has agreed to make the proposed facility available for use as the main press centre for the Games. However, the Bid Corporation is not relying on the facility being available for the Games and has in fact developed its budget and plan based on alternative accommodation. Thus, the Trade and Convention Centre is a project independent of the Games—useful if available, but not essential to bidding on and delivering the Games. Accordingly, we have not examined this project further.

The Sea-to-Sky Highway is the only feasible route from Vancouver to Whistler—location of the alpine, Nordic and sliding venues and the second athletes village. It has been the focus of several studies since 1983 to assess the risks, frequency and intensity of natural hazards such as snow and rock slides and to evaluate safety and capacity requirements. Upgrading in certain sections is required to meet future needs and to accommodate the 2010 Games traffic. The IOC has commented publicly on its concerns with the highway in its present form, and the Province and the Bid Corporation have identified this project as being essential to Vancouver being named the host city.

The Province has committed to a significant upgrade of the Sea-to-Sky Highway. The upgrade will improve safety and reliability, and accommodate regular traffic volume increases as well as the traffic volumes during the Games. The upgrade (see Exhibit 15), to be completed in 2009, is expected to cost $600 million.

What portion of that amount should be treated as an Olympic-related cost is a matter of judgment. The planned road improvements were developed based on studies of long-term need, and will have value both before and after the Games. The bid has, in essence, accelerated the timetable of construction and spending. (The Ministry of Transportation believes that the bid has advanced the start of construction of different parts of the project by two to four years.) Our conclusion is that the degree of priority now being given to this project, and the extent of acceleration, supports an argument that all of the costs should be seen as Games-related.
The process used to estimate the cost of the Sea-to-Sky Highway upgrade is reasonable, and the assumptions are plausible

The Ministry of Transportation has taken a project management team approach to developing a cost estimate for the highway upgrade. Consulting engineers have developed estimates for each of the 17 sections of the highway, a major engineering firm is acting as the owner’s engineer, and senior ministry staff oversee the estimation process.

The team examined a variety of options, including upgrading the highway to four lanes throughout. The Province determined that a complete four-lane option was too costly. Current plans are to upgrade to four lanes from Horseshoe Bay to just past Lions Bay, and in the Squamish area (see Exhibit 15). Three lanes are planned for most of the way from Lions Bay to South Squamish (safety upgrades will be made to the remaining two-lane sections) and from Squamish to Whistler. As well, sections of the British Columbia Railway’s railbed may be paved over temporarily, to be used to provide the third lane needed for peak hour traffic during the Games.

In preparing its $600 million estimate the project team worked in current (2002) dollars, but added an allowance for inflation. The team also included a contingency for the cost increases that normally occur when a project moves from the current preliminary design phase into detailed design.

We concluded that the process used for estimating the cost of the Sea-to-Sky Highway upgrade is reasonable, and the assumptions are plausible.

The process used to estimate medical costs is reasonable

Games organizers are required by the IOC to provide medical services free of charge to athletic teams and to the Olympic Family. They also need to assure that any medical needs of spectators attending the events will be met. The plan for medical services includes:

- dedicated first aid facilities at each Olympic venue to treat athletes, the Olympic Family and spectators;
emergency medical transportation by ambulance, including air evacuation from Whistler;

- a polyclinic (a full-service medical facility, excluding surgical capabilities, equipped with diagnostic and imaging equipment, pharmacy services and dental treatment) at each Olympic Village;

- medically necessary services available at a local hospital designated as the Olympic Family hospital; and

- a doping control program.

The provincial government has agreed to cover a portion of the estimated $29 million cost of providing these medical services. The working agreement is that the Province will be responsible for $13 million of the total cost and the OCOG $16 million. (In the Bid Estimates, the OCOG’s share is included within the games workforce, technology, and medical line items.) However, this division of costs has not yet been formalized.

The medical budget was developed by a team that included representatives from the Ministries of Health Planning and Health Services, BC Ambulance Services, Vancouver Coastal Health Authority, Canadian Ski Patrol, and Sports Medicine Council of BC. The team used information from prior games, including the 1994 Commonwealth Games and the 2002 Salt Lake City Olympic Winter Games. It was assumed that personnel would include a mix of paid and volunteer professionals, and that the OCOG would purchase adequate health insurance to cover the Olympic Family for medically necessary services during the Games. However, no allowance was made for inflation (see below).

We concluded that the process used to estimate medical costs is reasonable.

The process used to estimate security costs is reasonable

The IOC places great emphasis on the ability of the host country to guarantee the safety of all those involved in the Games. Responsibility for security is outside the mandate of the OCOG and falls on senior governments. For the Vancouver bid, both the Government of Canada and Government of British Columbia have provided guarantees to the IOC ensuring the safety and peaceful celebration of the Games. The two governments have also tentatively
agreed to share the cost equally. (This agreement will not be finalized until it is determined, in July 2003, if Vancouver will host the Games.)

The City of Vancouver and the Bid Corporation set up a work group to compile the security budget, with representatives from:

- BC Ministry of Public Safety and Solicitor General,
- Royal Canadian Mounted Police,
- municipal police departments,
- Department of National Defence,
- Canadian Security Intelligence Service,
- British Columbia Ambulance Service,
- Transport Canada,
- fire departments, and
- the private sector.

The group drew on its members’ experience in providing security for other high-profile events in Canada, and also examined information from previous Canadian events and the 2002 Salt Lake City Games.

The RCMP will be the lead agency responsible for security. All security will be coordinated through a central command centre. Personnel will come from RCMP units across Canada, municipal police forces throughout British Columbia, private security contractors, volunteers, and the military.

The perceived risk of an incident occurring during the Games is the key cost driver for security. The estimate is based on a preliminary assessment of the risks likely to be faced if the Games were held in Canada in 2002—that is, at today’s costs and today’s risk level.

The resulting security costs projected are $177 million, shared between Canada and British Columbia (we have not included the federal share in our summary of Games costs.) The costs include expenditures for equipment and supplies, personnel, and services.
Approximately 62% ($110 million) of the estimate is for police personnel. The estimate assumes, as is usual for special events, that a significant percentage of police time will be provided at overtime rates—a circumstance that dramatically increases costs.

It is also assumed that many personnel will have to be relocated from other parts of Canada, and so other major components of the estimates are the costs of their transportation and accommodation.

We concluded that the process used to develop the security estimate is reasonable. However, no allowance was made for inflation (see below).

The amount the Province has set aside to cover currently unquantifiable costs may be insufficient

The Province, through its guarantees, has agreed to be responsible for a number of currently unquantifiable costs. In its approved funding envelope for Games-related expenditures, the Province has included a $139 million contingency for such costs. However, we have been unable to find a reasoned methodology to support that amount, and are concerned that it may be insufficient.

In our review, we came across six factors that could make significant financial demands on the Province:

- OCOG cost overruns or revenue shortfalls (arising from, for example, bad weather)
- inflation
- foreign exchange risk
- indemnities
- security risk levels
- scope creep.

Influences on OCOG cost overruns or revenue shortfalls were discussed in the previous section. The other factors we briefly examine below.
Assumptions about inflation are not plausible when applied to the Province’s undertaking

As mentioned earlier, the IOC stipulates what must be in the Bid Estimates. This simplifies comparing the bids received from different countries. One particular requirement is that the Bid Estimates be at current prices—that is, as if everything was being built or purchased in 2002.

The Bid Corporation met this requirement of the IOC. In our view, however, the result is not the most realistic estimate of actual cost. For example, using predictions of future inflation from credible sources, the Bid Corporation estimates that inflation could add $40 million to the $620 million capital cost reported to the IOC. (Although the capital cost is shared equally between the federal and provincial governments, there is as yet no such sharing agreement for inflation-related capital cost overruns.)

And, inflation’s effect could be higher. The 2% rate assumed for this calculation is for general price inflation. Because relatively depressed conditions in British Columbia’s construction industry in recent years may have depressed capacity in the industry, we are concerned that construction costs during the next seven years could escalate more rapidly than general inflation.

Similarly, it is not plausible that inflation will have no effect on medical and security costs between now and 2010. It is understandable how this came about: both estimating teams were working with the Bid Corporation, and other estimates being developed by the Bid Corporation were conforming with the IOC requirement of estimating in 2002 dollars. However, the Province should recognize that it will have to bear extra costs to the extent this assumption proves to be untrue.

The Sea-to-Sky Highway upgrade is the only major expenditure discussed in this report for which an allowance for inflation has been included in the estimate. Thus, if inflation is greater than zero, the effects could be felt in the Bid Estimates’ operating expenses and capital expenses, and the estimates of medical and security costs—expenditures totalling more than two billion dollars.
Estimates of the Province’s Financial Undertaking

There may be offsetting inflationary increases in revenue. However, OCOG revenues from the IOC will be ultimately determined by the IOC, and there is no current indication that it will be adjusted for inflation. Provincial tax revenues could rise with inflation, but any such increased revenues could be automatically available to offset rising Olympic costs. Treasury Board would have to specifically allocate such additional amounts to the Games.

Changes in the exchange rate can also be material. However, the OCOG may be able to mitigate adverse changes by matching its expenses and revenues in foreign currencies, and by hedging (entering into contracts that fix the exchange rate the organization will face at a particular point in time).

The likely costs of the Province’s indemnities to Vancouver and Whistler are not yet known

The Province has agreed to indemnify the City of Vancouver and the Resort Municipality of Whistler for any costs or expenses they incur from holding the Games. At this time, the potential costs to the Province associated with this indemnity have not been quantified.

Threat levels at the time of the Games could materially affect the cost of security

Security costs were estimated on the assumption that perceived threat levels in 2010 will be the same as in 2002. However, security costs could increase significantly if world events closer to the Games increase the perceived threat level. As yet there is no agreement with the federal government on how such increased costs might be shared.

Material increases in project scope could make demands on the Province’s contingency amount

As plans for the Games become more detailed, unexpected additional needs are likely to arise. These could be the result of new expenditure items (for example, only as estimates for the Callaghan Valley Nordic centre were being developed did it become clear that the cost of a highway would be in addition to the venue cost). Or they could be the result of increases in the scope of work required for existing items—a common occurrence in large public projects.
The Games are very public in every sense. Their success will depend on the cooperation of a large number of stakeholders, among them, the IOC, international sport federations, international broadcasters, and three levels of government. Previous Games experience suggests that maintaining this cooperation typically requires allowing stakeholders to suggest refinements to the capital projects. The result is an evolving—and usually greater—scope. At the Sydney 2000 Games, for example, organizers planning a new sports venue found they were also required to upgrade a seawall so they could continue to have road access to their venue. A recent British Columbia example was the Millennium Line SkyTrain extension. Here, the total funding had to increase by about 3% to accommodate station and other improvements needed to maintain good relations with municipalities.

In developing its capital project estimate, Bid Corporation included contingency amounts sufficient to allow for likely cost increases as designs progress, and for unexpected costs arising during construction. However, we are concerned there is little contingency for increased project scope. The Bid Corporation believes with careful management of expectations scope expansions can be held within the budgeted contingency amounts. We agree this is a laudable goal, but also think Games organizers will have a difficult time maintaining such control.

Studies projecting economic impacts from the Games are reasonable; however, achieving the predicted positive impacts depends on British Columbia having a very effective tourism marketing program.

After Vancouver was selected to bid for the Games, the Capital Projects Branch of the Ministry of Competition, Science and Enterprise carried out an economic impact study of the Games for the provincial government. Reported in January 2002, this work was supplemented by a second economic impact study conducted by consultants and reported in November 2002. The latter study reviewed and verified the concepts and methodology of the first study and updated the values used in calculations.
The method used in the economic impact studies is reasonable and the assumptions are plausible.

Both studies, we found, adopted the input-output method, the most widely used method for modelling the economic impacts of events such as the Games. As well, both studies appropriately focused on incremental effects—that is, on the “new dollars” brought into the province by the Games—and not spending within British Columbia by local residents and businesses and by the provincial and local governments (the assumption being that those dollars would have been spent here anyway).

Both studies presented four different tourism scenarios, reflecting different levels of effort and their corresponding impact. Neither gave probabilities for the different scenarios, although both implied the medium to high visit scenario was the most likely to be realized.

We reviewed the two studies to see if their methodology is reasonable and their assumptions are plausible, and found that they are.

The projected economic impacts presented in the studies presume that a well-planned tourism marketing program is undertaken by the Province.

The two studies are clear that the highest economic impacts projected will only be obtained if a major provincial tourism marketing program (in addition to the Bid Corporation’s planned Olympics marketing program) is ready to start as early as 2003. As the consultants emphasized in the second report, “These [economic] benefits will not materialize automatically. They must be earned by a focused, adequately funded and skilfully executed marketing program.”
Exhibit 17 summarizes the main findings of the second study. The impact of capital construction and operating costs is the same in all four scenarios. In three scenarios, the incremental impacts on tourism are projected to occur from 2008 to 2014 or 2015, and in the high scenario from 2002 to 2020. (This study did not look at any incremental impacts that might arise from the Sea-to-Sky Highway upgrade.)

### Exhibit 17

**Total Incremental Impact of the 2010 Olympic Games**

Four scenarios showing the possible economic impacts on GDP, employment and tax revenues

<table>
<thead>
<tr>
<th>Tourism Scenario</th>
<th>GDP ($ billion)</th>
<th>Person-Years of Employment (thousands)</th>
<th>Federal Taxes ($ million)</th>
<th>Provincial Taxes ($ million)</th>
<th>Local Taxes ($ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>2.0</td>
<td>45</td>
<td>187</td>
<td>214</td>
<td>43</td>
</tr>
<tr>
<td>Medium</td>
<td>2.4</td>
<td>54</td>
<td>242</td>
<td>268</td>
<td>52</td>
</tr>
<tr>
<td>Medium-High</td>
<td>3.3</td>
<td>77</td>
<td>381</td>
<td>406</td>
<td>76</td>
</tr>
<tr>
<td>High</td>
<td>4.2</td>
<td>99</td>
<td>513</td>
<td>538</td>
<td>99</td>
</tr>
</tbody>
</table>

Re: Your report entitled “Review of the Estimates Related to Vancouver’s Bid to Stage the 2010 Olympic Winter Games and Paralympic Winter Games”: Thank you very much for the opportunity to respond to your above noted report. The Bid Corporation appreciates the work conducted by your office and believes that through this work, our Bid has been strengthened.

Since the beginning of this Bid, the Board of Directors, management and staff of the Bid strived to have the strongest technical bid of all of the cities. To us, this meant working harder than anyone else to create a plan for the Games that is rock solid, a bid that both the International Olympic Committee (IOC) and the people of British Columbia can take to the bank. We have put together a team of experts from British Columbia and beyond to help us accomplish our goal of developing an outstanding plan.

We promised to be open and transparent in our efforts. As we were developing the OCOG financial plan, we looked for a way to ensure that it was as rigorous as possible and ensure that the public had an opportunity to see the results of our work and therefore have confidence in the numbers. We invited your office to conduct a review of the financial plan. It seemed a natural fit given the need for the Province of British Columbia to fully understand its potential financial obligations and the reputation your office enjoys for independence.

We have worked very closely with all three levels of government throughout this Bid. It has been a good trial run for the important working relationships that must be in place to host a successful Games. Your report addresses issues directly related to both the Bid Corporation and the Province of British Columbia. I respond only to those issues relating to work done by the Bid Corporation and will leave responding to Provincial issues appropriately to the Minister responsible.

I am proud of the work done by our team in developing the Games Estimates. We have assembled a talented team of financial and games experts to ensure that we have prepared the best estimate possible. Over thirty people, including a number from leading chartered accountancy firms, contributed to building this plan and I believe your report concludes that a good job was done.

As requested, I am pleased to provide comments on behalf of the Bid Corporation.
Auditor General’s Comments

We are pleased and encouraged to see your comment that “The Bid Corporation’s approach to preparing the Bid Estimates is reasonable.” As noted above, considerable effort went into ensuring a reasonable and credible estimate.

We also took note of your other comments, including your suggestions of areas that the Province should watch. Hosting an Olympic Winter games is a massive undertaking requiring exemplary management and careful attention.

Your summary of the costs of staging the Games accurately reflects our own estimates.

Introduction

We agree with all of your comments in this section and believe that you have understood the relationships of all partners, the roles of each and the methodology of the Bid process.

The Bid Corporation’s Revenue and Expense Estimates

Conclusions – we agree with all of the conclusions you have reached in this section and appreciate the comments made about our approach to preparing the estimates.

General Assumptions – we agree with all of your comments in this section. As pointed out, the form of much of the work is stipulated by the IOC.

Revenue Estimates – we agree with the conclusions drawn and your comments with respect to reaching these targets. We do believe these targets to be achievable and such achievement is less controllable than, for example, managing the expenditure side of operations. Your comments fairly reflect this.

Operating expense estimates – we agree with the conclusion drawn about our processes and assumptions. Your portrayal of operating costs and the work done to prepare the estimates is accurate.
Capital cost estimates – we agree with the conclusion drawn about our processes and assumptions. We believe that our work on this area was more thorough than typical bids. We very much wanted to provide a reasonable degree of certainty to the citizens of Canada.

Estimates of the Province’s Financial Undertaking

We have long felt that this Bid, if successful, will provide a tremendous economic stimulus for our Province. We have also worked very closely with our Municipal, Provincial and Federal partners to ensure that a clear understanding of responsibilities and anticipated costs can be achieved.

We will leave commenting on your report as it deals directly with the Province to the Minister responsible.

In summary, we are pleased to have had your office conduct a review of our bid estimates and fully agree with your conclusions. Like many of the other activities undertaken by our team, I do believe that this extra assurance effort strengthens our bid by giving our citizens a degree of confidence not otherwise achievable without an independent review. You have committed to carry out additional reviews should our bid be successful. We hope that we all have the opportunity to see this commitment realized.

Thank you very much for all of the work done by your staff. You have added to the overall understanding of this exciting venture.

Yours truly,

Jack W. Poole
Chairman and Chief Executive Officer
Thank you for your report on the “Review of Estimates Related to Vancouver’s Bid to Stage the 2010 Olympic Winter Games and Paralympic Winter Games.”

I am pleased that the report endorses the Province’s approach to estimating costs and revenues of the 2010 Olympic and Paralympic Winter Games (the Games). The report states the provincial government’s approach to estimating costs and revenues is reasonable. It also concludes that the Province’s process in estimating upgrades to the Sea-to-Sky Highway is reasonable. It verifies the methods used in the economic impact studies, which show that a winning Bid will mean major economic benefits for British Columbians.

The provincial government is committed to fiscal accountability in both the management of costs and projected revenues of the Games. When the Province and the Vancouver 2010 Bid Corporation invited the Office of the Auditor General (OAG) to look at the methodology and numbers, we wanted independent eyes to go over our Bid to confirm the budget. We are satisfied with the outcome.

We agree we must be vigilant in managing the contingency fund. Funding approvals will be managed through Treasury Board, which will demand proof of requirement before releasing any funds. The OAG staff also states that a strict management of costs will be necessary to reach our revenue goals. I could not agree more: the Olympic Games will be successful if they are well managed.

With respect to the total Games-related costs to be funded by the Province, the OAG has chosen to include the Sea-to-Sky upgrade costs. However, although the highway project is an important component of a winning Bid, we believe it needs to be done, regardless of the Games, for safety and capacity reasons.

This Province has much to gain from the Games—economic revitalization and sports legacies that will lead to more sustainable communities and encourage British Columbians to embrace a healthier and more active lifestyle. The Province became a strong supporter in 1998 when asked by Tourism Vancouver, Tourism Whistler and Sport BC to support the National Bid. The government recognized the importance of being non-partisan and invited me as the Opposition MLA for West Vancouver-Garibaldi to be a member of the Board of Directors.

We would like to acknowledge that because of the work which you and your staff have undertaken prior to the completion of the Bid Book
itself—in real time—you were in the unique position of being able to suggest changes to the final plan as they did their review. We believe these suggestions strengthened the final plan tremendously.

In closing, we believe this report will help all British Columbians to better understand this initiative. Our responses to the specific points in the report are attached.

Sincerely,

Ted Nebbeling
Minister of State for Community Charter
and 2010 Olympic Bid

Auditor General’s Comments

The Bid Corporation’s approach to preparing the Bid Estimates is reasonable

We agree with the statement.

Achieving the financial results predicted by the Bid Corporation will need excellent management, effective marketing, and a favourable economy

We agree with the statement.

The Province’s approach to preparing estimates for major Olympic-related costs is reasonable

We agree with the statement. The Province has a $600 million budget for the Games over the next 7 years, plus $648 million in other costs including the Sea-to-Sky Highway. We agree the highway is an important element of a winning Bid and accept that the OAG has made, as the report states, a judgement call on including it here. However, we believe the highway needs improvements, for safety and capacity reasons, regardless of the Games.

With respect to medical and security costs, we believe the budgets were developed in a manner that will accommodate inflationary pressure.

Obtaining the predicted economic impacts will require an extensive tourism marketing plan

We agree with the statement.
The Province’s contingency needs continuing attention

We agree with the statement. We agree with the OAG that the detailed revenue and cost estimates prepared during the last two years of the Bid phase are reasonable and that good management will result in a fiscally successful outcome.

Treasury Board will have ongoing control over approving any access to the Olympic contingency fund.

There are three key areas I suggest the Province should watch

Ensure exemplary management

We agree with the statement. The Province and the other members have started a process with the Multiparty Agreement to ensure exemplary governance from the Bid phase through the Games construction phase, the Games themselves and beyond.

Pay careful attention to the management of contingencies

We agree with the statement. The Cabinet, in approving the Province’s contribution to the overall Games budget, has put into place rules that ensure that the Olympic contingency fund is closely managed with any expenditure requiring approval by Treasury Board.

Pay careful attention to revenue and economic benefits

We agree with the statement. The Province and the Vancouver 2010 Bid Corporation have created working groups for both tourism and business to ensure opportunities for British Columbia are maximized.

The Bid Corporation’s Revenue and Expense Estimates

Revenue estimates:

Revenue estimating methods are reasonable, and assumptions are plausible for the purpose of preparing an estimate to IOC specifications, but some revenue targets may prove challenging to meet

We agree with the statement.

Achieving the local (Canadian) sponsorship revenue target will require a favourable economy, strong sponsorship support, and an effective marketing strategy

We agree with the statement.
Operating expense estimates:
the process for estimating operating expenses is reasonable, and the assumptions are plausible for the purpose of preparing an estimate to IOC specifications
We agree with the statement.

Capital cost estimates:
the processes used to develop the capital estimates are reasonable, and the assumptions are plausible for the purpose of preparing an estimate to IOC specifications
We agree with the statement.

Estimates of the Province’s Financial Undertaking
The Province is an important guarantor and funder of the Olympic bid
We agree with the statement.

Exhibit 16
The Province’s estimated Games-related costs
We agree with the statement in that it separates the additional approved $600 million of funding for the Games from related funding that is accommodated within ministry plans.

The Games related marketing plan will be developed by appropriate ministries and the private sector.

The OCOG budget has a $6 million allocation for marketing controls.

The process used to estimate the cost of the Sea-to-Sky Highway upgrade is reasonable, and the assumptions are plausible
We agree with the statement.

The process used to estimate medical costs is reasonable
We agree with the statement.

The process used to estimate security costs is reasonable
We agree with the statement.
The amount the Province has set aside to cover currently unquantifiable costs may be insufficient

We believe that a reasonable process has been followed in the preparation of the Games, and Games related revenues and expenses. The OCOG has $90 million in contingency; the Province has $139 million remaining in its Olympic contingency fund; and each venue has a 10% design contingency, as well as a 5% escalation contingency. We understand the Auditor General’s statement and believe we will have to exercise due diligence to meet the revenue and expenditure targets.

Assumptions about inflation are not plausible when applied to the Province’s undertaking

We agree that inflation could impact the Bid estimates and we have worked with the Bid Corporation and our other member partners to identify and manage the risk.

As stated in the OAG report, the calculation of revenues and costs in today’s dollars simplifies comparing bids from different countries. In a justifiably cautious approach, the OAG then details the potential inflation impact on costs, while cautioning about relying on inflationary gains from revenue. This is a stance that we would expect the OAG to take as we want to know our exposures early so we can manage them.

The Province recognizes there is potential for an inflationary impact on the security and medical costs that it will pay directly in support of the Games. After reviewing the budget preparations, we believe the provincial share of the security budget of $175 million and the medical budget of $13 million can be managed well within the $600 million provincial budget established.

We have had extensive discussions with the Bid Corporation about how the security budget was calculated and it appears to have a substantial contingency built in that will more than offset inflation. Inflation on the medical budget should be able to be accommodated in the existing contingency budget if needed.

The likely costs of the Province’s indemnities to Vancouver and Whistler are not yet known

The Province has worked closely with these two partners to establish the process, under the Multiparty Agreement, for seeking funds under the indemnity. As the major costs of the Games are the responsibility of the
OCOG and the issue of security costs has already been budgeted, we believe any costs can be accommodated within the contingency fund.

Threat levels at the time of the Games could materially affect the cost of security

We believe that all likely scenarios were identified in the preparation of the estimate. Threat levels could also decrease, thereby reducing overall costs. The OCOG budget includes insurance to manage this risk.

Material increases in project scope could make demands on the Province’s contingency amount

We agree with this statement. The Province has taken a number of steps to protect against this possibility, including: venue agreements that contain conditions designed to contain project creep; the Bid Corporation has accepted the Province’s direction that industry “best practice” for the managing of major construction projects will be followed; and the Province has the right to approve all budget decisions.

Studies projecting economic benefits from the Games are reasonable; however, achieving those benefits depends on British Columbia having a very effective tourism marketing program

We agree with the statement. For over a year, the major tourism organizations have had a working group in place preparing a plan.

The method used in the economic impact studies is reasonable and the assumptions are plausible

We agree with the statement.

The projected economic impacts presented in the studies presume that a well-planned tourism marketing program is undertaken by the Province

We agree with the statement. A marketing and business opportunity plan is being developed by the Province, in cooperation with Tourism BC and the private sector.

Exhibit 17
Total Incremental Impact of the 2010 Olympic Games

We agree with the statement.
Appendix A: Office of the Auditor General: Risk Auditing Objectives and Methodology

The Office has four lines of business:

- Attesting to the reliability of government financial statements;
- Assessing the quality of government service plan and reports;
- Assessing the management of risk within government programs and services; and
- Providing strong support to the standing committees of the Legislative Assembly.

Each of these lines of business have certain objectives that are expected to be achieved, and each employs a particular methodology to reach those objectives. The following is a brief outline of the objectives and methodology applied by the Office for assessing the management of risk within government programs and services, that is, risk auditing.

Risk Auditing
What are Risk Audits?

Risk audits (also known as performance or value-for-money audits) examine whether money is being spent wisely by government—whether value is received for the money spent. Specifically, they look at the organizational and program elements of government performance, whether government is achieving something that needs doing at a reasonable cost, and consider whether government managers are:

- making the best use of public funds; and
- adequately accounting for the prudent and effective management of the resources entrusted to them.

The aim of these audits is to provide the Legislature with independent assessments about whether government programs are implemented and administered economically, efficiently and effectively, and whether Members of the Legislative Assembly and the public are being provided with fair, reliable accountability information with respect to organizational and program performance.
In completing these audits, we collect and analyze information about how resources are managed; that is, how they are acquired and how they are used. We also assess whether legislators and the public have been given an adequate explanation of what has been accomplished with the resources provided to government managers.

Focus of Our Work

A risk audit has been described as:

...the independent, objective assessment of the fairness of management’s representations on organizational and program performance, or the assessment of management performance, against criteria, reported to a governing body or others with similar responsibilities.

This definition recognizes that there are two forms of reporting used in risk auditing. The first—referred to as attestation reporting—is the provision of audit opinions as to the fairness of management’s publicly reported accountability information on matters of economy, efficiency and effectiveness. This approach has been used to a very limited degree in British Columbia because the organizations we audit do not yet provide comprehensive accountability reports on their organizational and program performance.

We believe that government reporting along with independent audit is the best way of meeting accountability responsibilities. Consequently, we have been encouraging the use of this model in the British Columbia public sector, and will apply it where comprehensive accountability information on performance is made available by management.

As the risk audits conducted in British Columbia use the second form of reporting—direct reporting—the description that follows explains that model.

Our “direct reporting” risk audits are not designed to question whether government policies are appropriate and effective (that is achieve their intended outcomes). Rather, as directed by the Auditor General Act, these audits assess whether the programs implemented to achieve government policies are being administered economically and efficiently. They also
evaluate whether Members of the Legislative Assembly and the public are being provided with appropriate accountability information about government programs.

When undertaking risk audits, we look for information about results to determine whether government organizations and programs actually provide value for money. If they do not, or if we are unable to assess results directly, we then examine management’s processes to determine what problems exist or whether the processes are capable of ensuring that value is received for money spent.

Selecting Audits

All of government, including Crown corporations and other government organizations, are included in the universe we consider when selecting audits. We also may undertake reviews of provincial participation in organizations outside of government if they carry on significant government programs and receive substantial provincial funding.

When selecting the audit subjects we will examine, we base our decision on the significance and interest of an area or topic to our primary clients, the Members of the Legislative Assembly and the public. We consider both the significance and risk in our evaluation. We aim to provide fair, independent assessments of the quality of government administration and to identify opportunities to improve the performance of government. Therefore, we do not focus exclusively on areas of high risk or known problems.

We select for audit either programs or functions administered by a specific ministry or government organization, or cross-government programs or functions that apply to many government entities. A large number of such programs and functions exist throughout government. We examine the larger and more significant of these on a cyclical basis.

Our view is that, in the absence of comprehensive accountability information being made available by government, risk audits using the direct reporting approach should be undertaken on a five- to six- year cycle so that Members of the Legislative Assembly and the public receive assessments of all significant government operations over a reasonable time period. We strive to achieve this schedule, but it is affected by the availability of time and resources.
Planning and Conducting Audits

A risk audit comprises four phases—preliminary study, planning, conducting and reporting. The core values of the Office—independence, due care and public trust—are inherent in all aspects of the audit work.

Preliminary Study

Before an audit starts, we undertake a preliminary study to identify issues and gather sufficient information to decide whether an audit is warranted.

At this time, we also determine the audit team. The audit team must be made up of individuals who have the knowledge and competence necessary to carry out the particular audit. In most cases, we use our own professionals, who have training and experience in a variety of fields. As well, we often supplement the knowledge and competence of our staff by engaging one or more consultants to be part of the audit team.

In examining a particular aspect of an organization to audit, auditors can look either at results, to assess whether value for money is actually achieved, or at management’s processes, to determine whether those processes should ensure that value is received for money spent. Neither approach alone can answer all the questions of legislators and the public, particularly if problems are found during the audit. We therefore try to combine both approaches wherever we can. However, because acceptable results-oriented information and criteria are often not available, our risk audits frequently concentrate on management’s processes for achieving value for money.

If a preliminary study does not lead to an audit, the results of the study may still be reported to the Legislature.

Planning

In the planning phase, the key tasks are to develop audit criteria—“standards of performance”—and an audit plan outlining how the audit team will obtain the information necessary to assess the organization’s performance against the criteria. In establishing the criteria, we do not expect theoretical perfection from public sector managers; rather, we reflect what we believe to be the reasonable expectations of legislators and the public.
Conducting

The conducting phase of the audit involves gathering, analyzing and synthesizing information to assess the organization’s performance against the audit criteria. We use a variety of techniques to obtain such information, including surveys, questionnaires, interviews and document reviews.

Reporting Audits

We discuss the draft report with the organization’s representatives and consider their comments before the report is formally issued to the Legislative Assembly. In writing the audit report, we ensure that recommendations are significant, practical and specific, but not so specific as to infringe on management’s responsibility for managing. The final report is tabled in the Legislative Assembly and referred to the Public Accounts Committee, where it serves as a basis for the Committee’s deliberations.

Reports on risk audits are published throughout the year as they are completed, and tabled in the Legislature at the earliest opportunity. We report our audit findings in two parts: an Auditor General’s Comments section and a more detailed report. The overall conclusion constitutes the Auditor General’s independent assessment of how well the organization has met performance expectations. The more detailed report provides background information and a description of what we found. When appropriate, we also make recommendations as to how the issues identified may be remedied.

It takes time to implement the recommendations that arise from risk audits. Consequently, when management first responds to an audit report, it is often only able to indicate its intention to resolve the matters raised, rather than to describe exactly what it plans to do.

Without further information, however, legislators and the public would not be aware of the nature, extent, and results of management’s remedial actions. Therefore, we publish updates of management’s responses to the risk audits. In addition, when it is useful to do so, we will conduct follow-up audits. The results of these are also reported to the Legislature.
Appendix B: Office of the Auditor General: 2002/03 Reports Issued to Date

**Report 1**
Building a Strong Work Environment in British Columbia’s Public Service: A Key to Delivering Quality Service

**Report 2**
Follow-up of Performance Reports

**Report 3**
A Review of Financial Management Issues in the Office of the Police Complaint Commissioner

**Report 4**
Monitoring the Government’s Finances

**Report 5**
Managing Contaminated Sites on Provincial Lands

**Report 6**
Review of Estimates Related to Vancouver’s Bid to Stage the 2010 Olympic Winter Games and Paralympic Winter Games