The Province's Olympic Bid minister, Ted Nebbling commissioned The Ministry of Competition Science and Enterprise to conduct an economic impact study of hosting the 2010 Winter Olympics. That study was dated January 2002.

Via a competitive process, InterVISTAS Consulting Inc. was selected to review that study, make modifications as appropriate, and update the study with more recent data. InterVISTAS is a Vancouver based consulting firm which has considerable experience conducting and critiquing economic impact studies.
Purpose Of Update

- Review and verify economic impact concepts and methods
- Incorporate new information
- Identify only incremental impacts
  - Any benefits from spending by BC residents and governments are excluded
  - Transport infrastructure excluded

We accomplished these things by:

- re-building the impact model, allowing a check of the mathematics and logic of the model, also simplifying the model to allow future updates to it
- reviewing references used for preliminary report
- reviewing additional references collected since the publication of the preliminary report, such as new information on impacts of other Olympics

We then made changes to the model and recomputed results
What Is Economic Impact?

- A gross measure of
  - Employment and wages
  - Gross domestic product
  - Tax revenues

- Three categories of impacts
  - Direct (Construction, tourism, operations)
  - Indirect (e.g., supplier industries)
  - Induced (general economic stimulation)

Every dollar spent generates new employment and stimulates economic activity.

Employment: in terms of FTEs, not jobs

GDP: aka “value added” is the value of labour, capital, profits, depreciation.

Federal taxes: personal and corporate income taxes, sales taxes

Provincial taxes: ditto

Direct impacts: attributed to spending in preparation and execution of Games

Indirect impacts: felt in industries that supply the firms that get direct spending

Induced impacts: consumption expenditures of direct and indirect

Economic impact methodology is not cost benefit analysis.
### Gross versus Incremental Impacts

- Incremental benefits are those generated by inbound spending
- Incremental impacts do not include transportation investments
- This study only measured incremental impacts
- This is not a net measure of benefits
- Could be considered a conservative approach

This report focuses on *incremental* economic impact.

- Not a standard practice
- Only impacts of dollars from out of province sources
- Could be considered a conservative approach
- Gross economic impacts would be larger, due to the impact of spending financed from within BC

An economic impact study measures the size of employment generated, GDP generated, etc. It does not weigh these positive impacts against the costs required to obtain them as a cost benefit study would do. An economic impact study simply *measures* impacts. A cost benefit study evaluates whether it is worthwhile. A cost benefit study of the Olympics would measure the dollar value of benefits from the Olympics and subtract from them the costs required to obtain them, such as organising costs, marketing costs, facility costs, etc. We were only asked to do an economic impact measurement. A cost benefit study is a much more complex task.
Economic impact is calculated on incremental tourism, not overall level of tourism. Only ascribe small percentage of total to Games.

There is a very good chance that some of the displaced tourism included in the model (45,000 skiers in 2010) will be recaptured by other ski hills in the BC tourism market. The impact of recaptured visitors is not included in the study results.
Our measure of incremental tourism impact must be differentiated from potential impact. The medium-high scenario which is the focus of the presentation, does not include potential tourism impacts for both earlier and later periods. For example, based on results from some other Olympics, we truncated Olympics induced tourism impacts at 2015. There is a potential for a lasting tourism legacy, but so as not to overstate the economic impact of the games, we did not include it in our measure. Of course, achieving the measured impacts or other potential impacts will required an effective marketing plan by the tourism industry.
There were a number of adjustments and improvements made to the economic impact measurement model.
Main Results

Increases in magnitude of impacts due to:

- Corrected error in use of discounted expenditures used real expenditures
- Increase in baseline (i.e., non-Olympic) tourism

Decreases in magnitude of impacts due to:

- Recognised some visitors are lower spenders (day visitors, VFR)
- Truncated pre and post-Games tourism effects
- Excluded transport investments

The update decreased visitor spending by recognizing that some visitors spend less. Our review of market research indicated that like Expo 86, an important portion of visitors will stay with friends or relatives rather than in hotels, and thus we reduced impacts due to their lowering spending rates. We also recognized the lower spending of same day visitors. These adjustments reduced impacts.

However, the correction to use of discounting in the preliminary study had a large positive impact on results. The previous study effectively made a double correction for inflation. We converted all future spending to inflation adjusted 2002 dollars.
How Are Impacts Estimated?

There are three broad types of Games expenditures that generate impacts:

- Capital/Construction expenditures
- Operating expenditures
- Tourism/visitation expenditures

BC Stats multipliers are used to relate the values of purchases in the province to employment, GDP and tax revenues on an industry by industry basis.

Incremental impacts are the portion of the gross impacts that are generated by out of province dollars. E.g.:

- Federal dollars
- International tourists
- International broadcast rights
Australia and Salt Lake City produced numbers slightly lower than the Medium-High scenario.

- Australia Forecasting Council expected 1.7 million in 7 years surrounding Games, we expect 2.7
- Salt Lake organisers expected 230,000 to Games, we think we can induce 550,000 (same in high)

We think that the High scenario is achievable. Will depend on effective and organised marketing.

We think that the Medium High scenario is without a doubt achievable. This scenario is used as the example today.

Long term, international visitation to BC has grown at roughly 3% p.a.

Assuming only 2% growth p.a. in the future, with the 2010 Games we can expect an additional 2% growth in the low scenario, and an additional 5% growth in international visitation.
These are the updated *direct* economic impacts.

The original study showed only total impacts, whereas the updated study shows direct and total impacts. The difference is due to the so-called multiplier impacts. The conditions for the achievement of such impacts do not always hold. Thus InterVISTAS prefers to focus on the direct impacts. However, in order to compare the current updated study with the previous study we have to use total impacts. This comparison is done on the next slide.
These are the updated total economic impacts - including indirect and induced (multiplier) impacts on the provincial economy.
## Comparison of Preliminary and Updated Total Economic Impacts

<table>
<thead>
<tr>
<th>Scenario</th>
<th>GDP</th>
<th>Person Years</th>
<th>Tax Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low – prelim</td>
<td>$1.6 Billion</td>
<td>37,000</td>
<td>$376 Million</td>
</tr>
<tr>
<td>Low – Update</td>
<td>$2.0 Billion</td>
<td>45,000</td>
<td>$444 Million</td>
</tr>
<tr>
<td>Med – prelim</td>
<td>$2.4 Billion</td>
<td>55,000</td>
<td>$610 Million</td>
</tr>
<tr>
<td>Med – Update</td>
<td>$2.4 Billion</td>
<td>54,000</td>
<td>$562 Million</td>
</tr>
<tr>
<td>Med-High – prelim</td>
<td>$2.8 Billion</td>
<td>67,000</td>
<td>$774 Million</td>
</tr>
<tr>
<td>Med-High – Update</td>
<td>$3.3 Billion</td>
<td>77,000</td>
<td>$863 Million</td>
</tr>
<tr>
<td>High – Prelim</td>
<td>$3.5 Billion</td>
<td>83,000</td>
<td>$982 Million</td>
</tr>
<tr>
<td>High – Update</td>
<td>$4.2 Billion</td>
<td>99,000</td>
<td>$1,150 Million</td>
</tr>
</tbody>
</table>

Source: IVC 2010 Olympic Economic Impact Update

Overall effect of adjustments was positive.

Negative effects of:

- shortening tourism projections
- increasing level of tourism displacement in Games year
- lowering tourism spend profile
- assuming higher import content for construction sector

Were more than offset by:

- eliminating the incorrect use of a discount factor
- using TBC’s recommended baseline tourism number
If we add the VCEC expansion economic impact…. Whose funding may be linked to hosting the Olympics...

Note that the VCEC impacts are greater with the Olympics than without.

Synergy is created by host-city status. Convention “wins” tend to increase with host-city status. Sydney is an example - bid:win ratio went up 34% in pre-Games years. There has not been a sufficient lapse of time to judge the lasting impact of Sydney on win rates.
If the VCEC is expanded, then the tourism impacts associated with the 2010 Games will be greater. This is due to:

1) the greater capacity of Vancouver to accommodate convention delegates and

2) because winning the bid for the 2010 Games will increase Vancouver’s success rate in bidding for future conventions.

This table adds to the 2010 Games impact determined in InterVISTAS’s report, only the increase in VCEC expansion impacts attributable to the 2010 Games.

This table does not include the economic impact of the VCEC expansion generated by construction or tourism without the 2010 Games.
This chart shows how construction impacts occur in the early years with tourism impacts beginning a few years prior to 2010 and then lasting for a period thereafter.

A long term increase in tourism is certainly possible, but to be conservative we truncated impacts after 2015 in this scenario.
Tourism causes the deviation in employment impacts.

Construction and operating expenditures do not change.
Direct Construction Impacts

Construction of facilities and transportation improvements

<table>
<thead>
<tr>
<th>Direct Impacts</th>
<th>GDP</th>
<th>Person Years</th>
<th>Wages</th>
<th>Taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Including transport investments</td>
<td>$1.1 Billion</td>
<td>25,000</td>
<td>$843 Million</td>
<td>$123 Million</td>
</tr>
<tr>
<td>Incremental Not including transport investments</td>
<td>$148 Million</td>
<td>3,000</td>
<td>$115 Million</td>
<td>$9 Million</td>
</tr>
</tbody>
</table>

Construction occurs between 2003 and 2009

Set at medium-high scenario.
91% of construction dollars are BC private sector or BC government. Only that portion of construction spending funded from outside of BC (excluding federal contribution to transport investments) is included.
Direct Tourism Impacts

Two-thirds of direct incremental impacts accrue to tourism sector

<table>
<thead>
<tr>
<th>Direct Impacts</th>
<th>GDP</th>
<th>Person Years</th>
<th>Wages</th>
<th>Taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross</td>
<td>$1.5 Billion</td>
<td>40,000</td>
<td>$1.4 Billion</td>
<td>$541 Million</td>
</tr>
<tr>
<td>Incremental</td>
<td>$1.4 Billion</td>
<td>39,000</td>
<td>$1.3 Billion</td>
<td>$537 Million</td>
</tr>
</tbody>
</table>

Set at medium-high scenario.
Average annual growth of international visitation to BC between 1972 and 2000 is calculated at 3%.

Assuming only 2% average annual growth from 2000 onwards gives an expected 100 million international visitors to BC between 2008 and 2015.

Low: 1.0 million additional
Med: 1.7 million additional
Med-High: 2.7 million additional
High: 4.3 million additional

The Olympic-induced tourists in the medium-high scenario add about 3% to the expected level of international tourism in these years without the Games.
Direct Operational Impacts

One quarter of direct incremental impacts are generated by operation expenditures

<table>
<thead>
<tr>
<th>Direct Impacts</th>
<th>GDP</th>
<th>Person Years</th>
<th>Wages</th>
<th>Taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross</td>
<td>$689 Million</td>
<td>16,000</td>
<td>$531 Million</td>
<td>$75 Million</td>
</tr>
<tr>
<td>Incremental</td>
<td>$537 Million</td>
<td>12,000</td>
<td>$416 Million</td>
<td>$60 Million</td>
</tr>
</tbody>
</table>

- ex) Policing, event timing, government services

Set at medium-high scenario.

In addition to construction and tourism there are also significant impacts from operating the Olympics.
Un-quantified Impacts - Not Measured in This Study

- Increased trade and investment for business community
- User benefits or construction impacts of transportation improvements
- User benefits of Olympic Legacy facilities

Olympics create an opportunity to promote home brands and competitive advantages. Can increase exports and business investment.

User benefits of Transportation improvements will be in the form of:
- travel time savings
- vehicle operating cost savings
- accident cost reductions
- parking cost reductions.

Rapid transit benefit estimated at between $600 million and $1.5 billion

Use of Olympic facilities:
- resident use
- other competitions
- training for Canadian and foreign athletes
## 2010 Economic Impact Summary
### Medium-High Scenario

<table>
<thead>
<tr>
<th>Total Impacts</th>
<th>2010 Games Only</th>
<th>2010 Games With VCEC Impact Due to Games</th>
<th>2010 Games With Total VCEC Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GDP</strong></td>
<td>$3.3 Billion</td>
<td>$4.1 Billion</td>
<td>$8.4 Billion</td>
</tr>
<tr>
<td><strong>Person Years</strong></td>
<td>77,000</td>
<td>100,000</td>
<td>187,000</td>
</tr>
</tbody>
</table>
Thank you!