> March 2007

# Halifax Commonwealth Games Bid

Were the costs and benefits assessed?

By James Wildsmith and Michael Bradfield



# **About the Authors**

James Wildsmith received his Master of Development Economics from Dalhousie University in 2006 and now works as an economist in Ottawa. This paper is a distillation of his thesis, *Uncertainty and the Economic Impact of Major Sporting Events: Assessing the Halifax Bid for the 2014 Commonwealth Games*.

Michael Bradfield is a professor of economics at Dalhousie University and supervisor of James Wildsmith's thesis. His research areas focus on regional development.

# **Acknowledgements**

The authors would like to thank Brenda Conroy, John Jacobs, Cheryl Stewart and Anne Webb for their advice and assistance in the production of this document. We would also like to thank the two anonymous reviewers who provided many beneficial suggestions. We are especially thankful for everyone's contributions given the time constraints for the project.

ISBN: 978-0-88627-540-2

March 2007



Canadian Centre for Policy Alternatives-Nova Scotia

Box 8355, Halifax, N.S. B3K 5M1

Tel: (902) 477-1252, Fax: (902)484-6344

Email: <a href="mailto:ccpans@policyalternatives.ca">ccpans@policyalternatives.ca</a>

Web: www.policyalternatives.ca

# **Contents**

```
Summary / 4
Introduction / 5
Why do cities bid for major sporting events? / 5
The Difficulties of Estimation / 6
The economic impact analysis / 6
How should the costs and benefits be estimated? / 8
Immediate costs, delayed benefits / 8
The Infrastructure and Facilities – Cornerstone or Millstone? / 11
The Legacy / 11
The Liability / 12
Conclusions and Recommendations / 14
Endnotes / 16
References / 17
```

# **Summary**

The continuing debate over the Halifax Commonwealth Games bid has shifted to a focus on the bid process, but there are issues of substance which still need to be addressed. This paper attempts to identify and clarify two important issues: how should we estimate the costs and benefits of major events; and the relevance of the experience of other cities' Commonwealth and Olympic games experiences.

The first issue is technical, but crucial for evaluating the bid. The economic impact analysis (EIA) which the Bid Committee used to estimate the net benefits of hosting the Games is not the appropriate tool for comparing costs and benefits. An EIA assumes that expenditures generate jobs and therefore considers expenditures to be a measure of the benefits from the Games when they are clearly costs. In addition, the specific model used for the Halifax bid uses an "expenditures multiplier" which is far larger than justifiable and magnifies the already over-stated "benefits." The appropriate tool to determine investment decisions is a cost-benefit analysis.

The second issue is to learn from the experience of other cities which have hosted major international sporting events. This paper shows that the legitimate benefits of these events are the legacy of the Games facilities and urban infrastructure built for them. As the revenues from the Commonwealth Games usually do not even pay for the cost of running the Games themselves, the public pays the cost of the infrastructure and for its long-tem maintenance. In most cities, the infrastructure is expensive to build, costly to maintain, and inappropriate to local needs.

Our conclusions are that the Halifax bid over-estimated the benefits and under-estimated the costs, and that hosting the Games would be a very expensive way to generate sports and other infrastructure.

# Introduction

There will be continuing debate about the whole decision-making pro-🗘 cess around Halifax' bid for the 2014 Commonwealth Games. What can we learn from the debate, both before and after the bid was withdrawn? There are questions about the decision to withdraw the bid, but the bid process itself also raised serious questions. Did the Bid Committee's estimates of costs and benefits make sense, and was the model used for its estimates appropriate? Did its claims of huge economic benefits distract attention from what should have been the focus — whether the infrastructure needed for the Games was appropriate for the city.

This paper assesses the Bid Committee's initial estimates and its estimating techniques. Its estimation model was inappropriate and the assumptions used flawed. While the lack of transparency in the process made it impossible to analyse directly the Halifax bid, the experiences of other major games events show that estimates of benefits are usually overly optimistic and costs grossly under-estimated. Could the public funds necessary for the Games provide greater benefits to Halifax and Nova Scotia if spent to meet recreational sport or other, more fundamental, needs?

### Why do cities bid for major sporting events?

Cities bid on sporting events such as the Commonwealth Games or Olympics knowing that hundreds of millions of dollars will be spent to host the event and that the revenues will not cover the costs. That's why these events are not usually hosted privately — the private sector is motivated by profits. The public sector's motivation to host such events, and risk the taxpayers' money, is based on the spill-over effects associated with the Games.

Often the most highly touted benefits are urban regeneration and tourism development. Urban regeneration takes place through the construction or improvement of facilities, whether sporting, housing or transportation. Tourism is assumed to be boosted through the draw of the events and their international media exposure. A city should only get involved in bidding for sports or other major events if the estimates of the benefits justify the costs and the risks.

# The Difficulties of Estimation

The private sector invests its money when the costs are outweighed by the estimated benefits. In most investments, the costs are incurred early, but may still be difficult to predict accurately. The benefits are normally spread out over the uncertain future and are therefore much harder to estimate. Nonetheless, a rational decision requires a methodology which permits a comparison of the benefits to the costs.

The public sector should also use cost/benefit analysis, but must include the broader range of costs and benefits which fall within its greater responsibilities and interests, such as the social and environmental impacts. To our knowledge, a conventional cost/benefit analysis has never been conducted of a major sporting event in Canada. In the case of Halifax and the 2014 Games, there were apparently no plans to undertake such an appraisal, despite the federal government requiring a "cost-benefit analysis to judge whether the financial support requested is justified in terms of the benefits which will accrue to Canada as a result." Did the Bid Committee make the Games seem too good because "much economic analysis research undertaken in the sports fields use...estimation mechanisms which arguably exaggerate benefits and ignore negative effects."

### The economic impact analysis

The Halifax bid impact estimates were not based on a comparison of the costs relative to the benefits of the Games, but on an "economic impact" analysis (EIA).

An EIA model is inappropriate because it defines the economic impact in terms of the number of jobs created, and assumes these jobs would not otherwise exist. In this view, the more money spent (i.e., the higher the costs) the greater the impact (the more jobs created). Thus with an EIA, even cost over-runs can be viewed as increased impacts and therefore additional benefits!

To assume the jobs would not otherwise be created is to assume the money would not otherwise be spent, that is, that we do not have other, more pressing, needs for public expenditures (health, education, housing, social services, recreational sports, public transit, etc.). It also assumes that individuals would not spend their increased disposable incomes if they had lower taxes because the provincial and city governments did not

subsidize the Games.

In economic impact analysis, the cost of the bid — construction of the Games' facilities and related infrastructure, and the costs of actually running the Games — are all accounted for as benefits. The second major benefit from the Games is the extra tourist expenditures generated by the Games themselves. These tourist dollars are often over-estimated.

As if the EIA methodology of defining costs as benefits and overestimating the tourism expenditures from the Games events were not problematic enough, the economic impact analysis of the Halifax Games compounds the errors by using an inflated expenditure "multiplier" to incorporate the succession of spending increases generated by the direct Games expenditures.

A multiplier is common in economics because an initial expenditure becomes income to the receiver of the funds. This receiver spends most of their increased income and that expenditure becomes someone else's income, and they spend part of it, which increases someone else's income, and they spend part of that. Thus, the initial increase in spending sets off a series of related increased income, increased spending effects and the final impact on expenditures and jobs is a multiple of the initial increase in expenditures.

The size of the multiplier depends on the fraction of each expenditure spent on local production rather than on imported goods and services. Not all of the costs of the bid and of construction are spent on goods and services produced in Halifax or even in Nova Scotia. For instance, if the consulting firm estimating the economic impacts is from outside Nova Scotia,4 its fees are an expenditure by the Committee but do not generate new jobs in Halifax. Expenditures outside our jurisdiction are called a "leakage" from the local spending stream.

This "leakage" of expenditures lowers the multiplier effects and this loss is higher the smaller the economic base; the smaller the region, the less its capacity to supply the range of goods and services needed. A reasonable general multiplier for Canada is 1.255 — for every additional \$1 of government spending, for instance, total output within the economy increases by an additional \$0.25. For construction, a major part of the Games cost, it is only 0.757.6 For Nova Scotia, the general multiplier would be close to 1; for a city such as Halifax it is less than one.

How can a multiplier be less than one? Halifax could spend \$780 million on the Games and tourists might spend another \$220 million, to deal in round figures. But of this \$1 billion in expenditures, at least \$500 million could be spent on imports. The base on which the multiplier builds would be only \$500 million and the total effect on local incomes and jobs, if the multiplier were as large as the national estimate (1.25), would be only \$625 million. Thus a reasonable estimate of the multiplier effect would be \$625/780 = 0.801, an "impact" of only 80 cents on every dollar spent to host the Games.

Given the limited information available from the Bid Committee, the multiplier used by the Sport and Tourism Economic Assessment Model (STEAM) applied to the Halifax bid appears to be 1.82 (the smallest value the STEAM model applied to other Games) — the additional tourist expenditures on the Games are estimated to be almost as much as the direct expenditures on the Games. Because of this excessively high multiplier, the "benefits" are conflated beyond the inappropriately included costs and dubiously-estimated tourist expenditures.

#### How should the costs and benefits be estimated?

An appropriate cost/benefit analysis would compare the expenditures, the \$780 million, to the benefits received. These benefits are generally recognized as: (1) the media exposure before and during the Games; (2) the additional tourist spending during and for up to ten years after the Games; (3) the legacy of sports facilities and infrastructure built for the Games; and (4) the social cohesion and local pride developed in planning and running a successful Games event. A cost/benefit analysis faces many of the same difficulties in estimating expenditures and benefits as faced by an EIA, but at least the cost/benefit model clarifies which is a cost and which is a benefit.

### Immediate costs, delayed benefits

Large projects are notorious for cost over-runs. Sports events are as susceptible to this as any other projects. In Barcelona the Olympics' costs increased almost five fold, from 237,000 million (April 1985) to the final figure of 1,119 million pesetas (July 1993). Part of the cost increase is the result of inflation. Preuss (2004) found that prices in Barcelona rose sharply when compared to the rest of Spain. Inflation is a hidden cost borne by the citizens of a large project location.

For the 2002 Manchester Commonwealth Games the final price tag was four times the original bid estimate. The main reasons given for the escalation of the costs were: (1) an unforeseen need for a large security presence as a result of 9/11; (2) the 1998 Games in Kuala Lumpur raised expectations for the Games beyond that which Manchester planned for during the bidding phase; (3) not budgeting for many costs; and (4) the general inexperience of the organizing committee. Moreover, Manchester's Games committee over-estimated private revenue streams from TV rights, sponsorships, ticketing, licensing, concessions and accommodations. These revenues did not even cover the operating costs of the Manchester Games.<sup>8</sup>

As already indicated, tourist spending is often over-estimated. Previous Games promoters' estimates have predicted double the actual increase in Games-related tourism. Victoria, for instance, had more tourists four years before its Commonwealth Games than during its 1994 Games. The Manchester Games claimed to have attracted 1 million visitors, but ticket sales indicate that the figure was likely much lower. Further, 31.5 percent of the tickets were sold to people living in greater Manchester, so their expenditures were not "new money."

Major events may also "crowd out" other tourists who cancel or postpone their trip to avoid the congestion generated by the major events. Shoval (2002) calculates that the Olympics actually cause a decline in tourism in the year they are held. Similarly, Pyo, Cook and Howell (1988) found, for the Olympic Games from 1964-1984, that in most cases there was a negative effect on the number of visitors. There are further examples of the crowding-out effect. A Utah Skier Survey from 1999-2000 found that nearly 50 percent of non-resident skiers indicated that they would not consider skiing in Utah during the 2002 Winter Olympics. Sixty-six percent of Danish tourists avoided the Lillehammer region during the Olympics in 1994.<sup>10</sup>

An additional issue, especially in light of bid committees touting regional benefits, is how much, and where, sport-related tourists spend their money. Pyo, Cook and Howell (1988) found that spending per visitor during the Olympics was lower than spending by the average tourist at other times. Similarly, French and Disher (1997) found that in Atlanta in 1996 spending per tourist was significantly lower than normal in areas not adjacent to Olympic venues and affected businesses up to 150 miles (241 km) away. The result is that the revenue projections based on average tourist spending tend to be over-estimated.

Major sporting event tourists tend to take in only Games-related events. In Los Angeles, attendance figures at popular tourist destinations were down 30 to 50 percent during the Olympics. 11 In Sydney, attractions that were not close to or directly related to the Olympics experienced decreased attendance.<sup>12</sup>

Estimating the subsequent tourism boost from the media exposure of a host city is still more difficult. A stream of benefits flows for years into the future. For Halifax this boost would have started in 7 years, with the 2014 games and continue for up to 10 years, 17 years from now. The same tendency to over-estimate tourism during an event exists for estimates of the long-term impact on tourism. 13 There is even a risk that tourism may decline post-event, if the tourists that opted not to visit during the event year choose not to come later, or if the event has a negative effect on the city's image.

On the one hand, EIA studies often claim major sports events create a large economic impact; on the other hand, there is no noticeable long-term impact on growth, at least for Canadian regions hosting the Olympics. 14 We can infer that major events do not generate additional economic impacts but may shift where and when economic activity takes place. Thus when the Halifax Committee claimed that the Commonwealth Games would generate significant increases in economic activities, the question arises whether this would translate into real economic growth or a shift in the location of the economic activities, and again requires the warning that economic impact analysis is inappropriate for predicting real benefits.

Halifax also faced a classic investment dilemma. There would be 6 years of expenditures after winning the bid before significant benefits accrue to the city. A dollar in 7 years is not worth as much as a dollar now – a dollar in 17 years, dramatically less. Thus, we cannot simply compare \$780 million spent leading up to the Games with \$1 billion of revenues received in 7 or 17 years. The lack of information from the Bid Committee prevents us from assessing its methodology in comparing costs and revenues.

Another problem is calculating a value for the social benefits of volunteering and for the increased physical activity of the population. These are benefits from running a successful Games event, but they could be achieved through other activities with more direct local benefits and much smaller costs, such as youth and recreational sports.

So what can we say about the estimates of costs and benefits provided by the Halifax Bid Committee? We know that an economic impact analysis provides inappropriate and misleading measures of the costs and benefits. Both this methodology and the results of other Games show that benefits are over-estimated and costs grossly under-estimated. The benefit that we can count on is the sports and urban infrastructure the Games leave for the future. Is this an infrastructure we want and is it at a price we can afford?

# The Infrastructure and Facilities – Cornerstone or Millstone?

### The Legacy

Infrastructure is the key to determining if the Commonwealth Games are ▲worth undertaking. As most of the cost of facilities is paid from public funds, those facilities must leave a legacy to justify the use of tax dollars.

Halifax has virtually none of the major sporting infrastructure needed to host a world-class event; as a result the city's bid required construction of major venues. These included a 50,000 seat stadium, an aquatic centre, an athlete's village, a field house, and various training and warm-up sites. The Manchester Commonwealth Games spent £111 million (approximately \$266 million) on their Games' stadium and £32 million (approximately \$76.8 million) for the aquatics centre.

The intent of the Halifax Games was to be athlete-centred, with the required facilities being built in Shannon Park, in close proximity to the proposed athletes' village. While this strategy may have helped Halifax win the Games, it would not have resulted in the facilities being located where they would have the best chance of being used after the Games. For example, a world class swimming pool, according to the HRM's *Public Facilities* Needs and Opportunities<sup>15</sup>, should be located in the Mainland Commons area because a pool of this type needs to be close to a cluster of families earning in excess of \$100,000 annually. Even if ideally located, the facility would require subsidies, as do other aquatic centres in HRM (Centennial pool, Needham Centre and Captain William Spry). 16 On the other hand, the 2004 report suggests that Shannon Park is the only suitable location for a stadium.

Before accepting that a stadium in Halifax is a sound investment, a few points must be considered. First and foremost, Halifax does not have an end use for the stadium. Speculation suggests that Halifax is just "a stadium away" from being awarded a CFL franchise. 17 But a CFL team may cause significant leakages from the local economy with the likelihood of non-local ownership and the certainty that most of the players will be imported. Thus, Coates and Humphreys (1999, 2000) and Humphreys (2001) found that building a new stadium or attracting a new sports team in the United States had a negative impact upon real per capita income.

Another consideration is the distribution of benefits of the sporting facilities. World class facilities are beyond the needs of the vast majority of the population. One would expect that world class facilities would charge user fees higher than lesser facilities. These fees would act as a barrier, especially to low income residents. Only those in Halifax who are near the facilities and can afford to use them will achieve maximum benefit while the entire province of Nova Scotia will share the costs.

As the facilities are the primary benefit of the Games, would Halifax be best served by spending so much money on facilities of these standards, in this location? Should we be building recreational-level facilities in dispersed locations for much less expense and put Shannon Park to other uses immediately?

### The Liability

While the Sydney 2000 Olympics Games may be viewed as a success by most parties, the sports park built to host the Games is frequently compared to a ghost town. Australian authorities struggle to find a sustainable use for Stadium Australia, the centrepiece of the sports park constructed for the 2000 Olympics. Four years later, the stadium incurred operating losses of Aus \$11.1 million and the total subsidies were Aus \$46 million annually for unprofitable Olympic venues.

Chalip (2003) found that many Olympic sporting facilities run a deficit or are torn down. Munich's Olympic Park shows annual losses of more than US \$30 million. These losses are increasing because maintenance becomes even more necessary over time.<sup>21</sup> Thus it is imperative that facilities be needed after an event to justify their capital and ongoing maintenance costs.

An option is to reduce the size of facilities after the Games, as was done in Victoria. The major infrastructure development involved the renovation and expansion of the University of Victoria Stadium to 30,000 seats, which was then reduced to 4,000 seats, post-Games. This may make a facility functional, post-Games, but it requires additional capital costs.

The one piece of infrastructure that may generate substantial revenue is the athletes' village. The future usefulness of the athletes' village rests in a design that is adequate for easy conversion from ten-day event use to long-term use. If the city is expanding and housing is in demand, the village can be used as a source of rental revenue, sold, or used for affordable housing. For example, Seoul's athletes' and media villages were sold before the Games for US<sub>2000</sub>\$264 million.<sup>22</sup> Conversely, a depressed market or undesirable design may result in a situation such as Barcelona where 33 percent of the apartments remained unsold a year after its Olympics. In the case of Halifax, we need housing now, especially affordable housing – would it make sense to wait another 7 years before we have it?

It is generally the case that an Olympics is able to generate enough revenue to cover operational expenses but only a few, if any, of the capital costs. Thus, the infrastructure investments must move a city in the desired direction to justify the expenditure.<sup>23</sup> This warrants asking, is the events' infrastructure needed for other purposes?

Barcelona is cited as an example of a city that was able to use the infrastructure to benefit the city. Botella (1995)<sup>24</sup> states, "Everyone agrees the real success of the Barcelona Olympic Games – and Paralympic Games - was the transformation which the city underwent with development which normally takes decades taking place in only six years." One of the keys to the success of the Barcelona Games identified by Brunet (1995 and 2005) was the city's ability to harness the Olympic Legacy through urban transformation, particularly the increased tourism infrastructure built as part of the infrastructure developments for the Games. Barcelona, as a result, was able to increase its number of visitors in the years following the Games.

What is impressive regarding Barcelona is that not only did the total number of visitors increase, but so did the occupancy rate. It is not clear to what degree the Games can be credited with the tourism increase, but it is clear that the expanded hotel capacity developed for the Olympics did not go idle afterwards. Seoul, Atlanta and Sydney were not so lucky or clever.<sup>25</sup> The long-run economic spin-offs did not materialize for the 1976 Montreal or the 1988 Calgary Olympics. Hosting the Olympics does not usually affect subsequent regional economic trends; it may even have a negative impact on growth.<sup>26</sup>

The Manchester Games are viewed as a success, despite running over budget, primarily due to the urban regeneration and post-Games use of the facilities. The city is able to use the Commonwealth Stadium as the new home for one of its soccer clubs and the revenues from this helps finance the maintenance of other facilities,<sup>27</sup> many of which became the home of national sporting institutes. This helped Manchester avoid the problem of recurring costs and under-utilization of its Games' facilities. However, Manchester has a far larger population than Halifax and an already-successful soccer franchise.

Thus we learn from other Games that the sports and urban infrastructure legacy comes with operating costs which may not be justified by their use. Further, we cannot expect that the conditions which generated some successes would also prevail in Halifax.

# **Conclusions and Recommendations**

With the rejection of the EIA method of estimating costs and benefits and the difficulties in performing a cost/benefit analysis on the entire Commonwealth Games, a different approach is needed. The most obvious method would be to focus on the infrastructure needed because many of the other factors are of questionable benefit. For starters, the operational budget of the Games is likely to be a break-even proposition at best — Manchester is an example where the revenues did not cover the operational budget. In spite of all the hoopla about the long-term benefits of mega-events such as the Olympics, there is very little evidence to back up the majority of the claims.

Large-scale Games could leave a negative legacy if they are viewed as being unsuccessful or if long-term crowding-out effects dominate. As a result it is a huge gamble to base the spending of hundreds of millions of taxpayers' dollars on the possibility of long-term tourism benefits. In addition, if the goal is to build community and increase sporting participation, the Commonwealth Games does not seem to be the most cost-effective method.

As Shaffer, Greer and Mauboules (2003)<sup>28</sup> conclude for the Vancouver Olympics, "The main potential justification of the Games is the benefit that British Columbia would derive as hosts and spectators of the Games and users of the facilities they provide." The facilities will be in the host city whether the Games are viewed as a success or a bitter failure. Infrastructure costs represent a large majority of a Games budget, for example, 85.5 percent of the Barcelona Games budget. Thus what should be determined is whether the infrastructure is of benefit to a city and is the best use of public resources in the region.

There are many ways to determine if the plans for the Games would fit into the development plans for Halifax. The focus should have been kept on the benefits of the facilities and urban infrastructure. Would the facilities have been the appropriate scale and in the appropriate location for the population to utilize them after the Games? Had the decision been to proceed, the location and size of the facilities should have maximized the benefits to the people of Halifax. It is important not to be distracted by the glitz and glory of the Games.

The Halifax Bid Committee was driven by the goal of winning the bid, which was its job, but this means the bid was tailored to the interests of the Commonwealth Games Federation (CGF) General Assembly. The bid submitted by the Halifax Bid Committee should reflect the needs and wants of the city of Halifax not of the CGF, a concept that was lost in the drive to win the bid at any cost.

We reject the use of the EIA model as it is an inappropriate tool to determine if net benefits outweigh net costs and only confuses the analysis. What was needed was a cost/benefit analysis. A cost/benefit analysis should determine if the infrastructure that Halifax required to host the 2014 Commonwealth Games was worth the expenditure. If a cost/benefit analysis estimated net benefits, these benefits should be compared with the return on alternative uses of the money.

These issues about the appropriate methodology for estimating costs and benefits need to be understood for future public undertakings. The lessons learned from other Games will also continue to be pertinent. They deserve to be part of the continuing debate. Now that the bid has been cancelled, the debate should also raise fundamental issues about the process by which the decision was made to initiate the bid, select the Bid Committee, and determine the Committee's terms of reference, its budget, and responsibilities to report fully and publicly. If there is embarrassment in this saga, it is not that our politicians stopped the bid too early, but that they tolerated a flawed process too long.

# **Endnotes**

- 1 Bianchini and Schwengel 1991; Bramwell 1995; Loftman and Spirou 1996; Roche 1992.
- 2 Sport Canada 2007.
- 3 Ingerson 2001; p.46.
- 4 STEAM 2007.
- 5 Sonne, C. and Jenness, R. 2000
- 6 Statistics Canada 2006.
- 7 Brunet 1995.
- 8 Manchester Organizing Committee 2002.
- 9 Preuss 2004.
- 10 Getz 1997.
- 11 Economic Research Associates 1984.
- 12 Preuss 2004.
- 13 Preuss 2004.
- 14 Walkerly, Scott and Nason 2006.
- 15 Plaskett 2004
- 16 HRM 1997.
- 17 CFL 2005.
- 18 Vigor 2004.
- 19 Evans 2005.
- 20 Coultan and Dick 2004.
- 21 Muncher Olympiapark GmbH *Geschaftsbericht 1991-2001*. Munich. As cited in Preuss 2004
- 22 Seoul OCOG, 1988.
- 23 Preuss 2004.
- 24 p.3.
- 25 Brunet 2005, p.9.
- 26 Walkerly, Scott and Nason 2006, p. 339.
- 27 Manchester City Council 2005.
- 28 p.27.

# References

- Bianchini, F. and Schwengel, H. (1991). "Re-Imaging the City," in Corner, I and Harvey, S (eds.) Enterprise and Heritage: Crosscurrents of National Culture, London: Routledge.
- Botella, M. (1995). "The Keys to success of the Barcelona Olympic Games," in Miquel de Moragas and Miquel Botella, The Keys to Success: the Social, Sporting, Economic and Communications Impact of Barcelona'92. Barcelona: Servei de Publicacions de la UAB, pp. 18-42.
- Bramwell, B. (1995). "Event Tourism in Sheffield: A Sustainable Approach to Urban Development?" Unpublished paper, Centre for Tourism, Sheffield: Hallam University.
- Brunet, F. (1993). Economy of the 1992 Barcelona Olympic Games, Lausanne: IOC.
- Brunet, F. (1995). "An Economic Analysis of the Barcelona '92 Olympic Games: Resources, Financing and Impact," in Miguel de Moragas Spa and Miguel Botella (eds), The Keys of success: the social, sporting, economic and communications impact of Barcelona '92, Bellaterra: Servei de Publicacions de la Universitat Autònoma de Barcelona.
- Brunet, F. (2005). "The economic impact of the Barcelona Olympic Games, 1986-2004: Barcelona: the legacy of the Games, 1992-2002" [online article]. Barcelona: Centre d'Estudis Olímpics UAB. http://olympicstudies.uab.es/ pdf/wp084\_eng.pdf
- CFL (2005). "Groups Look to add CFL team in the East," November 15, 2005. http://www.cfl.ca/index.php?module=newser&func=display&nid=6711
- Chalip, L. (2003). "Tourism and the Olympic Games," in Moragas, M, Kennett, C and Puig, N (eds), The Legacy of Olympic Games (1984-2000), Lausanne: IOC, pp. 195-204. Summer Olympic Games in Los Angeles, Los Angeles: typescript.
- Coates, D. and Humphreys, B. (2000). "The Stadium Gambit and Local Economic Development," Regulation, Vol. 23, No. 2, pp. 15-20.
- Coates, D. and Humphreys, B. (1999). "The Growth Effects of Sports Franchises, Stadia and Arenas," Journal of Policy Analysis and Management, Fall, Vol. 18, No. 4, pp. 601-624.
- Coultan, M. and Dick, T. (2004). "The pain of the games," Sydney Morning Herald, July 26. <a href="http://www.smh.com.au/articles/2004/07/25/1090693836746">http://www.smh.com.au/articles/2004/07/25/1090693836746</a>. html
- Economics Research Associates (ERA) (1984). Community Economic Impact of the 1984 Summer Olympic Games in Los Angeles, Los Angeles: typescript.
- Evans, M. (2005). "Write-up softens loss for Stadium Australia," Sydney Morning Herald. August 31. http://www.smh.com.au/news/business/writeup-softensloss-for-stadium-australia/2005/08/30/1125302565835.html
- French, S. and Disher, M. (1997). "Atlanta and the Olympics: A one-year retrospective," Journal of the American Planning Association, Vol. 63, No. 3, pp. 379-92.
- Getz, D. (1997). "The Impacts of mega events on tourism: strategies for destination," in Department of Tourism Studies (ed.), The Impact of Mega Events,

- papers of the Talk at the Top Conference (7-8 July), typescript.
- HRM (1997). Committee of the Whole Minutes: June 16, 1997, Viewed Aug 28, 2006. http://www.halifax.ca/Council/Minutes/1997/cw970616.pdf
- Humphreys, B. (2001). "The myth of sports-led economic development," *Economic Development Commentary*, Vol. 25, No. 1, pp. 34-37.
- Ingerson, L. (2001). "A Comparison of Economic Contribution of Hallmark Sporting Events and Performing Events," in Gratton, C and Henry, I (eds), Sport and the City: The Role of Sport in Economic and Social Regeneration, London: Routledge, pp. 46-59.
- Loftman, P. and Spirou, C. (1996). "Sports stadiums and urban regeneration: the British and United States experience," *Paper to the Conference*, Tourism and Culture: Towards the 21st Century, Durham.
- Manchester City Council (2005). *Manchester City Council announces unique funding success*. <a href="http://www.manchester.gov.uk/news/2005/sep/fund.htm">http://www.manchester.gov.uk/news/2005/sep/fund.htm</a>
- Manchester Organizing Committee (2002). Post Games Report, Volume 1. (Cited in Preuss (2004))
- Plaskett, B. (2004). *HRM Capital District: Public Facilities Needs and Opportunities*. Halifax: Cantwell & Company LTD.
- Preuss, H. (2004). The Economics of Staging the Olympics: A Comparison of the Games 1972-2008, Northampton, MA, USA: Edward Elgar.
- Pyo, S., Cook, R., and Howell, R. (1988). "Summer Olympic tourist market learning from the past," *Tourism Management*, Vol. 9, Iss. 2, pp. 137-144.
- Roche, M. (1992). "Mega-Events and Micro-Modernization: On the Sociology of New Urban Tourism," *The British Journal of Sociology*, Vol. 43, No. 4, pp. 563-600.
- Seoul OCOG (1988). Official Report of the Organizing Committee of the Games of Seoul 1988, vol. 1, Seoul: OCOG.
- Shaffer Marvin, Greer, Alan and Mauboules, Celine (2003). Olympic Costs and Benefits: A Cost-Benefit Analysis of the Proposed Vancouver 2010 Winter Olympic and Paralympic Games, Vancouver: Canadian Centre for Policy Alternatives.
- Shoval, N. (2002). "A new phase in the Competition of the Olympic gold: The London and New York bids for the 2012 Games," *Journal of Urban Affairs*, Vol. 24, No. 5, pp. 583-599.
- Sonne, C. and Jenness, R. (2000). Methodology for Assessing the Macroeconomic Impact of Federal Fees on Commercial Shipping: Final Report, Reviewed by M. McCraken, Informetrica Limited.
- Sport Canada. (2007). Sport Canada Policy for hosting International Sport Events: Appendix II Guidelines for Completing Economic Evaluation.
- http://www.pch.gc.ca/progs/sc/pol/accueil-host/ann-app-02\_e.cfm
- Statistics Canada (2006). Input -Output National Multipliers 2003, Statistics Canada Input Output Division. Ottawa..
- STEAM (2007). Canadian Sport Tourism Alliance, <a href="http://www.canadiansporttourism.com/eng-home.cfm">http://www.canadiansporttourism.com/eng-home.cfm</a>.
- Walkerly, Elizabeth C., Scott, Byron G. and Nason, James M. (2006). "Common Trends and common cycles in Canada: who knew so much has been going on?" *Canadian Journal of Economics*, Vol. 39, No.1 February, pp. 320-347.
- Vigor, A. (2004). "Creating an Olympic Legacy: Careful Planning is needed for London Olympics to meet our myriad aspirations," New Economy, IPPR.