The Melbourne 2006 Commonwealth Games: implications for the local property market

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Abstract:

In 2006 Melbourne will host the 18th Commonwealth Games with Brisbane being the last Australian city to host this event over two decades ago in 1982. Melbourne has not held a major global sporting event since the 1956 Olympic Games, although the 2006 Commonwealth Games follows on from the successful 2000 Sydney Olympics. These sporting events have continued to grow from strength to strength, and have been assisted by Australia's close affiliation with sport and the widespread global media coverage. In a similar manner to other sporting events that Melbourne hosts, including the Australian Tennis Open, Formula One Grand Prix, Motorcycle Grand Prix, Melbourne Cup and Australian Football League, the city and its inhabitants are consumed by these events. The 2006 Commonwealth Games is certain to follow this trend.

The task of hosting the Commonwealth Games is enormous, although actively pursued in a fierce bidding process by competing cities. The benefits are undisputed and include an influx of visitors to the host city, an opportunity to enhance or rebuild infrastructure such as transport, plus the worldwide focus on the host city before and during the event. A high level of planning is undertaken for years well in advance of the event, and this may have an effect on the surrounding property market. Through the media both buyers and sellers are constantly reminded of the upcoming Games, the venues and the increased demand that will occur. Accordingly, this research investigates the task of hosting a major global sporting event such as the Commonwealth Games, and importantly how affects infrastructure in a host city. Attention is placed on the 2006 Commonwealth Games and the Melbourne property market. Whilst every host city differs in characteristics such as size, location and timing of the event, the findings of this study will assist a future host city to plan for the highly irregular circumstances that accompany a high profile one-off major sporting event.

Introduction

Although two years apart, the Commonwealth Games and the Olympic Games are held every four years by constantly changing host cities. Whilst the Olympics are commonly acknowledged as the 'world's largest peacetime event' (Cashman and Hughes, 1999), the Commonwealth Games also facilitate a friendly sporting atmosphere that captures global attention. Unique characteristics of the Commonwealth Games include being the only Games which share a common language - all athletes and officials can converse with each other in English, creating an atmosphere that has led to the Commonwealth Games being long known as the "Friendly Games" (Melbourne 2006 Commonwealth Games Corporation, 2004). Although often overshadowed by the Olympic Games even though there are many similarities, the Commonwealth Games have achieved a stand-alone status of a major global sporting event.

Each individual sporting event provides an opportunity for countries to compete in a variety of sporting events over two weeks, with the 2004 Olympic Games in Athens continuing this tradition and considered an outstanding success. Once again the triumphant athletes were rewarded with medals reflecting their success, which were then collectively compared between countries as a measure of national pride. For example, Australian athletes won more gold medals in Athens than at any other Olympics and this was widely perceived as a loose measure of global success. The well-attended street parades in most Australian capital cities held after the return of the Olympians also support this perception. Hence, there is a lot of evidence to support the popularity of a major sporting event.

According to Mr Bob Carr, the premier of NSW, the Sydney 2000 Olympic Games created more than A\$1.1 billion in new trade and investment for NSW business; A\$1.4 billion in projects under negotiation; more than A\$300 million in Olympic related contracts in regional NSW and close to A\$600 million in Olympic contracts for small business in metropolitan areas; bookings for A\$630 million worth of international business conferences and meetings; and more than 2,500 new jobs (SCCNSW, 2001, pp18). Other Olympic impacts on the local economy include the increase in export of goods and services, the temporary employment during the Games, the Olympic promotion, and the possible increase in the number of firms that has been set up in Australia.

Indirect benefits from a major sporting event such as the Commonwealth Games are extremely difficult to measure, commencing with the goodwill built between competing nations and the respect earned on the world stage. The impact from a major sporting event on the surrounding property market is often overlooked, especially from a before, during and after perspective (Wu and Reed,

2004). At the same time advertisers seek the exposure available via the media saturation, such as the traditional opening and closing ceremonies, as well as many of the high profile events in-between including athletics and swimming. Nevertheless, there is another form of indirect benefit that is also actively pursued, namely the recognition as the host-city of a major global sporting event. This aspect forms the basis of this study with the focus placed on the 2006 Commonwealth Games that are to be held in Melbourne, Australia. Consideration is given as to why Melbourne bid for the games, and what the city realistically stands to gain before, during and after the event. Other aspects behind the scenes are also examined, including the increasingly high cost of security, as well as the impact on the broader property market.

Using a major sporting event to develop infrastructure

Prior to the Atlanta summer Olympics, the burden of hosting the Olympic Games put the host cities, except Los Angeles, into debt (Fensham, 1994). This was mainly due to a huge input of funds raised by the host cities and the difficulties in accommodating the huge temporary visitor flow that easily went beyond the host city's capacity (Wilson, 1996). If a city may potentially lose money, then it is unclear why it would still compete sharply for the host rights although there are two possible reasons. Firstly, there may be a measurement difference, which means the host city government's financial hardship does not reflect the indirect benefits it received. In reality, many cities or nations hosting the Olympic Games can receive huge benefits in various indirect forms (Preuss, 2000). Secondly, it is possible and preferable that the Olympics could be staged successfully through careful planning and innovative management approaches without causing financing constraints.

The Olympic Games are a costly exercise and have generated their share of debate and controversy, which may not be clarified until long after the event (Cashman and Hughes, 1999). Thus, to measure the real success of hosting the Olympic Games then both short term and long term impacts should be taken into consideration. With a good understanding of the Olympics itself and the characteristics of the host city, it may be easier to achieve both public satisfaction and socio-economic gains. Certainly the direct revenue from hosting the Games should not be the only measure of the Games' success (Plumb and McKay, 2001). In other words, the Olympics generate both direct and indirect, short term and long term benefits, which, when mixed with other social and economic variables, have become more sophisticated and harder to measure.

To successfully host a major sporting event that attracts a large number of competitors, officials and visitors for a relatively short period of time, substantial infrastructure is needed to house and move large numbers of people around the city. At the same time, the host city must continue its daily

routine including rush hour traffic to and from workplaces, school children to and from school, and the normal operations that occur daily in a major city. And to further complicate this scenario, athletes are housed relatively close to the city's CBD, such as in Homebush (Sydney) or in Parkville (Melbourne). To overcome some of these problems and ensure the successful operation of the Games including the smooth transit between locations, new infrastructure must be constructed in most instances. Whilst the indirect costs are difficult to initially measure, the budget for the direct costs appears relatively straightforward with funds sourced from various levels of government. For Melbourne 2006 the overall budgeted cost is in the realm of \$1.1 billion, with the Victorian government to contribute a maximum of \$697 million (Gilchrist, 2004).

As announced by the Beijing Municipal Government (2001), a spending plan estimated at RMB180 billion (about A\$33 billion) on 127 urban infrastructure projects is in preparation for the Olympic Games in Beijing during 2008. In addition, some RMB 15 billion will be spent on the construction of sporting facilities. The State Bureau of Statistics has estimated that an economic growth of 0.3 – 0.4% is to be added to the nation's GDP between 2002 and 2008. This is supported by a similar estimation of 0.3% in an Olympic impact study conducted by Goldman Sachs, an international financial advisor (Dick, 2001). Also, the Beijing Statistics Bureau has estimated that hosting the event will boost the city's GDP by more than 2% over the next 10 years, keeping its annual growth rate above 10%. However, when considering China's recent entry into the World Trade Organization (WTO) and its economic reform, the real contribution from the Olympic Games to the city's economic growth is not clear.

A recent trend has evolved where host cities using major sporting events such as the Commonwealth or Olympic Games as a means of developing substantial infrastructure. In some cases it appears that this infrastructure, although directly liked to the hosting of the Games, exceeds the direct requirements of this sporting event. For example, the 2006 Commonwealth Games has necessitated the following expenditure on infrastructure:

- \$51 million on ungrading Melbourne's Sports and Aquatic centre, including a new 50 metre pool and a roofed outdoor pool to complement the existing 75 metre indoor pool (McLure, 2004);
- The 2006 Commonwealth Games village will host 4,500 competitors and 1,500 team officials by March 2006, in comparison to 15,000 athletes and officials that contributed to the 2000 Sydney Olympics (Gilchrist, 2004). The games village will occupy a 20ha site at Parkville that will be converted to house up to 700 apartments, a 100 bed nursing home and in excess of 1,000 homes (Melbourne 2006 Commonwealth Games Corporation, 2004).

Security concerns

Counter-terrorism has become an important consideration for a city hosting a major sporting event, and the costs associated with Melbourne are substantial. For Melbourne 2006 the Commonwealth government will provide up to \$500 million specifically to ensure the 2006 Games are safe for competitors, officials and visitors (Wright, 2004). The emphasis will be placed on protecting Melbourne's ports, railway stations, airports, water and food supplies, power sources, transport systems and hospitals, which is a substantial upgrade from the resources employed for Sydney 2000.

The increased funding on security follows the heightened awareness concerning possible terrorism since September 2001. Although the Commonwealth government has financially supported the Melbourne 2006 Games, this will place additional pressure on similar sporting events since it is a non-recoverable expense. Even if this level of security expenditure is unavoidable, it is an expensive component that affects the viability of successfully hosting the Games.

Infrastructure and the Sydney 2000 Olympic Games

Under the design guidelines in the Homebush Bay Master Plan (1995), there was an integration of sporting, residential, commercial and recreational facilities, with open spaces, parklands and infrastructure improvements. These facilities have since formed the major elements of a redeveloped Homebush Bay, which has become an entirely new satellite sports city (Goad, 1999). Some individual developments have also set up new benchmarks in terms of development concepts and management approaches (Webb, 2001). All of these will have certain levels of impact on issues such as urban planning, architectural design, industrial relationship, risk management, and environmental sustainability design, and will provide valuable experience for future projects with similar scales. The concept of integrating Olympics related developments with the Homebush Bay redevelopment plan worked well in terms of the balance between the task of successfully hosting the event and local socio-economic benefits. According to Goad (2001, pp146), "Homebush Bay appeared to be, and in the end proved to be, ideal on all counts". It must be acknowledged that the Sydney 2000 Olympics were used as the catalyst to redevelop a precinct that was in need of renewal, and substantial resources and planning was undertaken to achieve this task.

Although the development of the infrastructure for the Sydney Olympics was perceived as successful by some, it was subject to criticism. For example, Webb (2001, pp11) argued that "today it leaves the state with a legacy of world-class sporting venues, a housing estate incorporating many 'ecologically sustainable' features – and a headache, the government needs to attract further investment for development of the site, and events that draw large numbers of people to use it." Weirick (1996)

criticised the 1995 Homebush Bay Master Plan since the NSW State government had moved away from the initial ideas; in other words, away from the real attractions of Sydney's bid. The major concerns in this regard include the distribution of new sport facilities, the change of the Olympic Village design scheme, and the location of the Olympic Village. The conceptual flaw at the heart of the master plan was that the 'urban core' was proposed without an urban program, where a simple solution was to integrate a substantial residential component among other land-uses (Weirick, 1996).

Urban planners and developers have regarded a major sporting event as a powerful tool to accelerate a city's urban design and development plans. For example, the Sydney Olympic site (Homebush Bay) was described by Jopson (1995) as a 'post-industrial space' that suffered various environmental and planning problems. Despite being the demographic and geographical centre of Sydney, for many years, land value in Homebush Bay was much lower than what it should be. In this regard, a major sporting event may be treated as an accelerator to fulfil the state government's long-term plan of transforming this area, in order to reach its highest and best use and to create a healthier urban landscape.

The site at Homebush Bay had been targeted for Olympic bid since the 1970s (Goad, 2001). In 1985, Homebush Bay was mainly zoned as sporting and recreational use. Consequently, the Homebush Bay Corporation was established to develop the area subject to designated land use. After being confirmed as the host city, the Homebush Bay site was run by the NSW government's Olympic Coordination Authority (OCA) and was under large-scale construction activities (Wilson, 1996). Winning the Olympic host right put the site's long-term development plan into practice; the changes of land use type directly raised land value in the area (Denton, 2000). According to Wilson (1996, pp610), the entire 'Olympic corridor' from the city to Homebush Bay is destined to be re-valued, because of the exclusive property and tourism potential.

A major finding in Plumb and McKay's research (2001) was that a major sporting event can have the most substantial impact on urban form and governance of the host cities, not the local economy. It was further stressed that hosting the Olympics is a great opportunity to have long-term impact on the patterns of urban development through investing in infrastructure and environmental improvements. This has put a question mark on Athens' and Beijing's Olympic agendas, in how may the two cities use the Games to address their transportation and environmental problems. However, it seems that major sporting events may be losing this attraction. Preuss (2000, p.89) pointed that "In future, the IOC wants to prevent the Olympics from being used as a means of urban development and, therefore, plans to strongly limit the use of Games-related revenues for investments in the infrastructure and

redevelopment of a host city. Thus, an essential incentive to host a major sporting event may be lost..."

Despite the substantial and lasting effects on the structural changes of the host cities by staging a major sporting event, if a city fails to complete related projects on time then the image of the city will be severely damaged. This, in turn, will impose a negative effect on the city's long-term development (Preuss, 2000). Problems may also arise in the infrastructure construction process when political changes occur. For example, according to Wilson (1996, p.605), the Labour government elected in March 1995 faced various difficulties in raising funds and obtaining supports from the industry, which directly resulted in departures from the planning and personnel associated with the bid.

The Games Village - The 2006 Commonwealth Games

The athletes' village for the 2006 Commonwealth Games in Parkville, Melbourne has drawn enormous public interest and is continually under debate (Anon, 2002). The proposed residential development has raised three major concerns: the proper scale of the proposed development; the most suitable location in terms of communities' integration; and the issue of balancing community well being and private developer business benefit. Interestingly, the village for the Sydney Olympics needed to address similar questions. Some of these questions have already been answered; however others are still vague as certain impacts can only be examined through a longer timeline and consequently are much harder to be measured and predicted (Cashman and Hughes, 1999).

An earlier study examined the real estate markets of four recent Olympic host cities (Seoul, Barcelona, Atlanta and Sydney), looking at both short-term and long-term impacts from the Games (Plumb and McKay, 2001). As Olympic related residential developments in the host city comprise different forms, such as the Olympic village, newly constructed houses/apartments within the Olympics vicinity, and renovated houses, it was concluded that the predominant Olympic impact on the residential sector is indirect. In other words, the process of designing, locating and constructing a Games village is an effective means to affect the host city's urban development plan (Plumb and McKay, 2001).

The success in developing the village for a major sporting event is a result of collaborative working relationship, which was described by Webb (2001) as 'a culture of Collaboration'. According to Webb (2001), the building industry has gained two types of experience through the development process from the Sydney Olympics: first, the Olympic Village project offered the industry new skills, strategies, and a powerful demonstration that 'working safe isn't necessarily working slow'; second,

the environmental sustainability criteria had brought to the residential development sector new industrial standards. According to Challinor (1999), the project was developed to achieve three major goals, namely, the capacity of accommodating the event, the integration of area into the surrounding environment, and providing sustainable development practice and modern lifestyle. It was argued that the building industry can share environmental responsibility and take credit for investing in such developments (AIQS, 2001).

One major impact from the Sydney Olympics that has been observed was the introduction of the sustainable development concept to the Olympic village project (Goullet, 2000). As the athletic village has become a typical model that exemplifies world's best practice and innovation in sustainable residential development, the project will impact not only on the Sydney residential property industry, but also on the international residential development standard (Challinor, 1999). It seems that a Games village should not simply be considered to have an impact on the supply/demand pattern, but more importantly on the global residential development trend.

Revisiting the games village for Sydney 2000, the project manager described the project as a successful case to show the industry how to deal with combined issues such as multiple stakeholders, complex client mix, large diverse design team, strict time constraints, critical sustainable development commitments, and future profitability (Bovis Lend Lease, n.d.). However, the project has also faced adverse criticism. Weirick (1996) pointed out two defects: the abandonment of the environmentally sustainable design scheme due to commercial pressure, and the isolated location of the site. Later the village was further criticised due to withdrawal of the "eco-village" concept and the rise of the second competition that was viewed as "a totally inefficient use of the city's design talent", which he concluded as "not as exciting as the young, original design team imagined it could be…" (Weirick, 1999, pp79-80)

The Games Village is a core component of a major sporting event such as the Commonwealth or Sydney Games. Whilst conjecture will always seem to remain concerning the location and size of the village, increasing emphasis is being placed on sustainability and environmental issues. Drawing on the Sydney experience and looking forward to Parkville, Melbourne, a central location appears to be the optimal solution with a strong emphasis placed on the residual effect. Sydney 2000 has shown that this balance is achievable although must be accompanied by strategic planning and careful project management.

The Games village and the surrounding property market

Research has been conducted into the real estate markets of four recent Olympic host cities (Seoul, Barcelona, Atlanta and Sydney), with the emphasis placed on the short-term and long-term effect of the Games. It was concluded that the process of designing, locating and constructing the Olympic Village is an effective means of influencing the host city's urban development plan (Plumb et al., 2001).

As in most major cities in the developed world, 'free' expansion of residential suburbs has become problematic in several Australian cities. As a prevalent urban development stage and a cure for urban sprawl, the need for regenerating degraded/degrading suburbs into well-planned residential neighbourhoods is becoming a favourite means for cities, such as Sydney and Melbourne. The housing construction industry is one of the most important players in achieving this goal.

As one of the identified characteristics of the major Australian capital cities, suburban sprawl has been noted by local government and planning authorities (National Housing Strategy, 1991). Major Australasian cities, such as Sydney, Melbourne and Auckland, have widely spread suburban residential districts, which, in some areas, have shown signs of potential problems. A similar phenomenon (suburban sprawl) has occurred in other parts of the developed world. For example, in the United States the suburban population has doubled since the 1950s (Nivola, 2000). In the developing countries, especially some of the world's fastest-growing cities in Asia, although the single detached house is not the dominant housing type, irrational expansion has nevertheless caused serious social and environmental problems (Lockwood, 2000). Among various problems that suburban sprawl has generated, the most significant one may be the much higher expenditures in urban services and infrastructure system; in other words, an unsustainable usage of urban resources. This has become one of the areas currently attracting intensive research in countries such as the United States and UK.

Suburban sprawl may be briefly described as an urban development phenomenon in major cities, where residential suburbs are developed alongside of the transportation system and lack essential components that could be found in well-established residential communities (Duany, Plater-Zyberk and Speck, 2000). Two features, namely the extensive transportation systems that connect city-suburb and city-city, and the declining usage of public transport, directly contribute to the acceleration of suburban sprawl. In US cities such as Los Angeles, Detroit, Atlanta and Memphis, the urbanised regions have stretched over huge areas, imposing both physical influences on the natural environment and psychological impacts on local residents (Miara, 2001). The less controlled expansion is

occupying agricultural land and urban green space, and adding to traffic congestion; it also isolates residents from a healthy social lifestyle, as there is insufficient supporting facilities provided in those sprawling areas. Although it has been said that expansion of residential suburbs will eventually be stopped either by a physical boundary, such as a water body, or economic constraints, however it makes sense to intervene in this process at an earlier stage, for we are dealing with the challenge of how to efficiently use the limited urban resources, in other words, a sustainable development of high-quality life.

Urban regeneration or revitalization has become one of the most effective tools in most developed cities to deal with the problems of suburban sprawl or urban land use degradation. In the United Kingdom, Brodie and Schmidt (2001) pointed out that urban regeneration and the re-development process have once again been favoured by local authority master planning in the last decade. Design professionals, developers and local residents together with local authorities are involved in this process. According to Brodie and Schmidt (2001), the approach of public/private collaboration in urban regeneration is becoming popular throughout Europe and the result is satisfactory. In the United States, one major concern of the current urban renewal task is expressed by Rutherford (2002) as to determining how to transform existing suburbs into places that will attract reinvestment and maintain a healthy tax base. In Australia, especially in the major metropolitan areas, planning authorities and local governments have started urban consolidation and regeneration program to achieve satisfactory housing development and better use of urban resources simultaneously. The new master-planned residential suburb in Newington has taken both into account and proved to be a good model for Australian cities' housing development. In fact, some residential development projects have replaced old degraded industrial properties in some inner city areas and have achieved sound results.

Conclusion

There is little debate that holding a major sporting event such as the Commonwealth Games is a major boost to the local economy of the host city. This is partly due to the relatively infrequency of this event, being every four years for the Commonwealth Games but over an even longer period each time a country hosts the games. Nevertheless, when hosting the Commonwealth Games there should be an emphasis placed on achieving a 'win-win' situation for all stakeholders concerned, although this result has been under threat with recent Olympic Games. Clearly a cost-benefit analysis is aptly suited to analyse these benefits, although other positive aspects such as indirect benefits are often hard to measure.

It would appear that hosting a major sporting event is now the main catalyst to undertaking substantial infrastructure works in the host city. For example, the Melbourne Cricket Ground used the Melbourne 2006 Commonwealth Games as the reason behind a substantial redevelopment of this sporting facility, with the central focus placed on a completion date prior to 2006. Whilst it is undisputed that the games could not be held without this facility, the question arises whether the facility would be redeveloped without the games. This scenario is commonplace for other host cities, and threatens the relationship between a host city, its infrastructure and avoiding a financial loss situation. In other words, care must be taken to ensure that all costs directly associated with the game are valid, and not associated with long-term redevelopment plans for major infrastructure.

There are other advantages for the property market that can be linked to a host city. A successful sporting event will leave the perception of a liveable city with visitors, and potentially attract new long term residents. Realistically, the effect on the property market is difficult to disentangle from the myriad of other influencing factors. If new infrastructure is created, existing sporting facilities are redeveloped and subsequently gentrification is encouraged, then the effect on the property market can only be positive. Poor management or abnormal factors such as terrorism can have the inverse result. Most people are looking towards Melbourne 2006 to acknowledge the sporting heroes of the Commonwealth, although when the Games are over the residual property market should be in better shape than when it arrived.

Reference List

- AIQS, (2001), 'Lessons from the Olympics' in *The Building Economist*, June 2001, pp.22-7.
- Anon. (2002), 'Commonwealth Games Village uncertain' in *The Age*, 29th June 2002, p.4, Melbourne.
- Brodie, K and Schmidt, R., (2001), A new urban vision, Urban Land (Europe), summer 2001, ULI Cashman, R and Hughes (Ed, 1999), *Staging the Olympics*, UNSW Press.
- Challinor, C., (1999), 'The Olympic village: showcasing sustainable planning and urban design' in *Landscape Australia*, vol.21, no.4, Nov/Dec/Jan, pp.298-302.
- Duany, A, Plater-Zyberk, E and Speck, J., (2000), Suburban Nation, the Rise of Sprawl and the Decline of the American Dream, USA
- Denton, T., (2000), 'Giving Homebush a kick start' in *Property Australia*, Sept., pp.14-16.
- Dick L., (2001), "China the Olympics Going to Beijing", *Goldman Sachs Asia Pacific Economics Analyst*, July 2001, pp11-4
- Fensham, R., (1994), 'Prime Time Hyperspace: The Olympic City as Spectacle', in *Metropolis Now: Planning and the Urban in Contemporary Australia*, Gibson, K and Watson, S (Ed), pp.171-85 Sydney: Pluto.
- Gilchrist, M. (2004), 'Games village puts squeeze on athletes' in *The Australian*, May 19, p.6.
- Goad, P., (1999), 'Olympia to Australia, in Patrick Bingham-Hall' in *Olympic Architecture: Building Sydney 2000*, pp.12-7, Watermark Press, Sydney.
- Goad, P., (2001), 'Competition & circumstance: urban legacies of the Olympics' in *Debating the City: an Anthology*, pp.142-63, The Historic House Trust of NSW, Sydney.
- Goullet, E., (2000), 'Sydney 2000' in *Property Australia*, pp.40-1, Sept.
- Jopson, D., (1995), 'Green vision to stop Pyrmont being buried by buildings' in *Sydney Morning Herald*, 11/5/1995.
- Lockwood, C., (2000), "Cityscape", Urban Land, November/December 2000, ULI, US
- Melbourne 2006 Commonwealth Games Corporation (2004), www.melbourne2006.com.au, accessed 6th August 2004.
- McLure, D., (2004), 'Chilly reception for open-air pool' in Geelong Advertiser, p.15.
- Miara, J., (2001), "Visiting Sprawl", Urban Land, July 2001, ULI
- National Housing Strategy, (1991), Australian housing: the demographic, Economic and Social Environment, AGPS, 1991
- Nivola, P., (2000), "Are Europe's Cities Better?" Urban Land, January 2000
- Plumb, C and McKay, M., (2001), *Reach Beyond the Gold the Impact of the Olympic Games on Real Estate Markets*, JLL Global Research.
- Preuss, H, (2000), *Economics of the Olympic Games Hosting the Games 1972-2000*, Walla-Walla Press, NSW, Australia.
- Rutherford, P., (2002), "Reinventing", Urban Land, July 2002, ULI, US
- State Chamber of Commerce NSW (2001), Sydney 2000: a report on the Olympic impact on business in a host city, NSW.
- Webb, T., (2001), the Collaborative Games, Pluto Press Australia Limited, Sydney.
- Weirick, J., (1996), 'a non event? Sydney's Olympics moics' in *Architecture Australia*, March/April pp80-3
- Weirick, J., (1999), Urban design, Cashman, R and Hughes (Ed), *Staging the Olympics*, pp.70-82, UNSW Press,
- Wilson, H., (1996), 'What is an Olympic city? Visions of Sydney 2000' in *Media, Culture & Society*, vol.18, pp.603-18.
- Wright, L. (2004), 'Games terror fear' in *Herald Sun*, March 21, p. 21.
- Wu, H. and Reed, R.G. (2004), 'And the winner is Sydney? Before and after the 2000 Olympic Games' in *The Australian Property Journal*, vol.38, no.3, pp.165-10.