

**Sport and the local economy: the role of stadia in
regenerating commercial property**

DAVIES, L. E. <<http://orcid.org/0000-0003-0591-7507>>

Available from Sheffield Hallam University Research Archive (SHURA) at:

<http://shura.shu.ac.uk/64/>

This document is the author deposited version. You are advised to consult the publisher's version if you wish to cite from it.

Published version

DAVIES, L. E. (2008). Sport and the local economy: the role of stadia in regenerating commercial property. *Local Economy*, 23 (1), 31-46.

Copyright and re-use policy

See <http://shura.shu.ac.uk/information.html>

**Sport and the Local Economy: The Effects of Stadia Development on
the Commercial Property Market**

Dr. Larissa E. Davies

Faculty of Development and Society
Sheffield Hallam University
City Campus
Howard Street
Sheffield
S1 1WB

L.E.Davies@shu.ac.uk

Tel: 0114 225 4534

Sport and the local economy:

The effects of stadia development on the commercial property market

Abstract

The use of sports stadia for economic development and regeneration has gained increasingly credibility in recent years, both academically and in terms of UK urban policy. However, evidence to support the effectiveness of stadia for these purposes is highly variable. This paper uses a comparative case study of the Millennium Stadium and the City of Manchester Stadium to examine the effects of stadia development on the commercial property market, an area of research that has received little attention in the literature. It uses the expert opinion of professionals working in real estate, together with the experience of key stakeholders in Manchester and Cardiff to provide empirical evidence that stadia can create tangible and intangible impacts on the commercial property market, but that these are variable between different sectors. It concludes by arguing the need for further research on the role of stadia in the regeneration process if the impacts of these developments are to be maximised in the future.

Sport and the local economy:

The effects of stadia development on the commercial property market

Introduction

In recent years, an increasing number of urban and regional planners, regeneration agencies and local authorities in cities across the UK have introduced policies of sports-led regeneration as a means of revitalising urban areas. In some cases this has involved the construction of major sports stadia for sporting events, such as in Manchester for the 2002 Commonwealth Games, while in others it has been the development of smaller scale facilities in Sport Action Zones, designed to bring benefits to deprived communities (Percy, 2001). In both cases, it is hoped that the development of sporting infrastructure will regenerate the physical environment and bring with it local economic development to the surrounding area and wider city.

The notion of using sporting infrastructure for regeneration purposes in the UK is not a new phenomenon. It originated in the 1980s, when several cities used property and enterprise-led development policies to build prestigious sports-related developments to promote regional and economic development (Lawless, 1990; Loftman and Nevin, 1995; Jones, 2001; Davies, 2002). Following a similar rationale to civic leaders across North America, where sports facilities were first utilised as a centrepiece for downtown regeneration by Indianapolis in the 1970s (Euchner, 1993; Austrian and Rosentraub, 2002), stadia in the UK were seen as

a mechanism through which cities could diversify their economic base and enhance their competitiveness for investment and jobs on a national and international level. Furthermore, they were seen as playing an important role in image creation and civic boosterism. Bale (1995, p. 13) explains,

Stadiums feature on the business pages as much as in the sports columns as new arenas are perceived by city boosters as symbols of success, of urban machismo and vibrancy, as magnets to attract new industry and development, and to provide a much-wanted – or, at least, much perceived – multifunctional leisure facility.

Throughout the 1990s, UK cities have continued to develop stadia to either host major sporting events or in response to the Taylor Report (Taylor, 1990) and the need to upgrade and modernise football stadia in the aftermath of the Hillsborough Tragedy. Over this period, the development of sports stadia have been increasingly associated with a range of government regeneration initiatives on economic development and social exclusion. However, despite the growing use of grand-scale multi-million pound stadia developments to address these issues, there is little documented evidence that they can actually regenerate urban areas. Brown (2001, p. 18) argues that

It has become something of a given that the construction of new stadiums will bring economic and social benefits to the areas in which they are sited...yet these schemes raise as many questions as answers, and there seem to be few guarantees about the pay-off for a local area, communities and the cities in which they live. The assumption that new stadiums will inevitably bring these benefits is just that.

Although detailed and comprehensive research has been undertaken on the economic effects of stadia development since the 1980s, there is little agreement amongst academics and policy makers as to whether stadia generate net

positive outcomes for local economic development in the longer term. While proponents argue that stadia development can generate economic benefits including job creation, increased commercial activity and subsequent multiplier effects, new tax revenues from businesses, the development of a landmark site and increased community provision (Ladd, 2003); critics contend that the benefits are overstated. Some argue that while stadia provide jobs to the local community, the scale and quality of these is often uncertain and they are frequently low skill, low paid, casual or part time (Rosentraub, 1997; Jones, 2002). Moreover, others conclude that in reality sports stadia deliver little in economic terms (Baade and Dye, 1990; Baade, 1995, 1996; Humphreys, 2001; Rosentraub, 1997) and are not in fact the economic development engines they claim to be (Chaplin, 2002). Nevertheless, the latter is partly due to the fact that often such benefits are exaggerated, either knowingly or otherwise to obtain public subsidy for the development of sports stadia (Crompton, 1995; Noll and Zimbalist, 1997; Jones, 2002).

In addition to the contested discourse around stadia impact, much of the evidence relating to stadia development is based on the North American experience and while this literature does provide some relevance to the British context there are fundamental differences underpinning the funding and development of sports stadia in the UK and North America, which necessitate caution when using the research to evaluate UK stadia developments. For example, Thornley (2002) observes how in the US, cities compete with each

other for inward investment and the sports industry. Local states develop stadia to attract professional sports teams and franchises from other cities and devote considerable public funds from local taxpayers' money to these projects. Jones (2002) similarly notes how the threat of franchise flight in the US and the loss of perceived economic benefits associated with professional teams have resulted in taxpayers subsidising team owners. In contrast, stadia in the UK are funded largely by national public funding or public-private partnerships. Cities in the UK have no power to determine the use of tax revenues or to propose local tax increases in order to subsidise stadium construction. Additionally, the geographical movement of teams is unlikely (Jones, 2002), thus the need to retain or lure professional teams does not exist.

An area of the economic literature that has been seldom explored is the impact of stadia construction on the real estate market. This is despite the significance of property enhancement to the regeneration process. Although there has been some evaluation of property values around different types of sports developments, most notably golf courses and parks (e.g. Crompton, 2000; 2005), there has only been limited analysis of sports stadia development on property markets. Isolated studies have examined the impact of stadia on residential property (Bowen, 1974; Bale, 1995; Tu, 2003; Davies, 2005). However, there has been no research carried out on the impact of stadia on commercial real estate markets.

There are examples of consultancy studies that have been undertaken that focus more broadly on the real estate impacts of major sporting events (Plumb and McKay, 2001; Hobkinson, 2002; Sanderson *et al*, 2002) and although they do not comment specifically upon commercial property values, they do report various impacts on commercial property market indicators such as construction activity; occupancy rates; take-up levels; rentals and prices. Sanderson *et al* (2002) and Plumb and McKay (2001) both argue that the more direct short term real estate impacts of the FIFA World Cup and the Olympic Games are concentrated in the hotel sector and are represented in terms of increased room occupancy, daily rates, hotel performance as measured by revenue per available room and in the case of the Olympic Games, increased supply in the host city. While Sanderson *et al* (2002) and Plumb and McKay (2001) found mixed evidence of impact in the office market, both reports suggest that the hosts of major sporting events may experience a cyclical increase in demand and rents of the retail sector around the time of the event, but that it is likely to be short lived and linked to other factors such as consumer confidence in the broader economy. Additionally, Plumb and McKay (2001) conclude that the direct real estate implications of hosting events will depend upon the size and relative maturity of the local property market, with larger impacts being generated in smaller and less mature markets.

This paper attempts to address the shortfall in literature identified and contribute to the evidence base on sport and urban regeneration by presenting research carried out on the effects of the Millennium Stadium, Cardiff and the City of

Manchester (COM) Stadium on the property markets in their respective surrounding areas. While Davies (2005) focuses on residential property, this paper explores the impact of stadia on the commercial real estate market, an area of research that as noted previously has received even less attention. It uses the expert opinion of professionals working in the field of property, regeneration and sport, together with the experience of key stakeholders directly involved with or affected by the construction of stadia to establish perceived impact. The paper provides empirical evidence to suggest that sports stadia can generate tangible and intangible impacts on the commercial property market, but that these are variable between sectors. It also suggests that stadia can enhance the commercial development potential of the surrounding area. The paper concludes by arguing that with investment in sport and regeneration likely to increase in the period leading up to the 2012 Olympic Games in London, there is a need for further detailed research on the role of stadia in the regeneration process, including the real estate market, to maximise the potential offered by major sporting infrastructure constructed in the UK in the near future.

Research methodology

A comparative case study approach was used to investigate the effects of stadia development on the property market. The case studies selected were the City of Manchester (COM) Stadium and the Millennium Stadium (Cardiff). These stadia

were chosen because they were newly constructed within five years of the research being undertaken and were both built primarily to host a major sporting event in the UK. The Millennium Stadium was built for the 1999 Rugby World Cup and the COM Stadium was built for the 2002 Commonwealth Games. The case studies were also considered to be an interesting comparison due to their contrasting locational characteristics, with the COM Stadium being located on a brownfield site, 1.6km from the centre of Manchester and the Millennium Stadium being located in the city centre of Cardiff.

Given the limited research on sports stadia and property values, there is no recognised method for investigating the property impact of sports stadia. Hedonic Analysis has been used widely in property research (e.g. Askham *et al*, 1996; Henneberry, 1996a; Watkins, 2001; Irwin, 2002) and was also used by Tu (2003) in his study of the Fedex Field Stadium. However, as a form of mathematical modelling and positivist enquiry, it was not considered to be appropriate for the investigation of sports stadia on property in Cardiff and Manchester for a number of reasons. Firstly, Hedonic Analysis is a strictly quantitative methodology and it would not have allowed for exploration of the intangible economic impacts of sports stadia, such as image creation and desirability, which can significantly influence real estate values (Crompton, 2000). Secondly, the use of this technique would have required recent sales transactions data to estimate impact and in the case of East Manchester, where sales of residential property over the last decade have been very limited, it would

have been difficult to obtain the required data. Finally, the unavailability of a comprehensive data set, which contained detailed information on property characteristics in both cities, meant that Hedonic Analysis was not viable. Instead, a methodology was devised which used the expert opinion of property professionals together with the opinions of local interest groups or key stakeholders to quantify, qualify and separate out the impact of the stadia from other variables impacting on commercial property in the surrounding area.

Research design

A four stage mixed method approach, including a desk based review of literature; expert interviews; exploratory interviews and a questionnaire survey were used to collect quantitative and qualitative information on the impact of the case study stadia on the property market in each city. The research was carried out between January and June 2003. The data collection is summarised in Table 1.

[Insert Table 1]

Stage 1 of the research was an extensive literature and desk-based review of sports stadia, regeneration and property. The aim of this was to establish the current evidence base and to identify participants for Stage 2, the expert interviews.

The expert interviews were carried out with five individuals working or researching in the field of sport, regeneration, property and/or planning, who were considered to have expertise in one or more of these areas. The expert interviews were used to identify data source availability and an appropriate methodology for investigating the impact of stadia construction on the real estate market. The experts selected included a member of the Royal Institute of Chartered Surveyors (RICS) Regeneration Policy Panel; a research professor in planning and property; a research professor in planning and regeneration; a senior researcher in sports economics and a director of a sports research consultancy firm. The information from the expert interviews was also used to identify research participants for Stage 3, the exploratory interviews and Stage 4, the questionnaire survey.

Figure 1 shows the rationale and selection of the research participants for Stage 3 and Stage 4. Research participants for these stages were selected to obtain a range of viewpoints across various stakeholders involved in the stadia and real estate development process.

[Insert Figure 1]

Stage 3, the exploratory interviews were carried out with five key stakeholders in both Manchester and Cardiff. They were designed to allow qualitative examination of the attitudes and opinions of individuals and organisations

involved with the strategic planning of the stadia through to those affected by the stadia construction. In each city, a senior representative from the local authority, regeneration agency and Chamber of Commerce, together with a private developer and a member of a local residents' group were selected. Themes discussed included the types of development stimulated by stadium construction; impacts on residential and commercial property; the role of the stadium in the surrounding regeneration; sustainability and policies required to sustain and enhance impacts.

Stage 4, a postal questionnaire survey, was carried out with property professionals. Property agents and surveyors were selected as they operate at the interface between supply and demand of the residential and commercial property markets. They were considered to have a key influence over property-related decisions and therefore have expert knowledge of market behaviour (Henneberry, 1996b). A questionnaire survey was considered to be the most appropriate method to extract quantitative information of expert opinion, while also providing a complement to the qualitative information obtained from the interviews. All property agents and surveyors listed in the Yellow Pages in each city were selected. In total, 371 surveys were mailed, 115 in Cardiff and 256 in Manchester. Fifty seven surveys (15.4%) were returned and fully completed from the two case study stadia, with 26 (22.6%) from Cardiff and 31 (12.1%) from Manchester. While in relative terms the response rate was low, the majority of the surveys returned contained detailed and extensive

information, and were completed by experienced senior staff (director, partner, manager) in the property or surveying company. Therefore the sample of data did contain some useful insights from individuals considered expert in the local property market.

Investigation of non-response revealed that this was largely due to limited or lack of knowledge about the impacts of the stadia. Spatial analysis of the questionnaire returns found a correlation between non-response and increasing distance away from the stadia, thus suggesting that the understanding and knowledge of stadia impact in each city was localised. This factor may also explain the lower response from Manchester companies, with questionnaires being distributed over a much larger area than in Cardiff. Further research of this nature should therefore consider targeted sampling of property professionals in close proximity to stadia developments.

The impact of sports stadia on commercial real estate: Research findings

The research found evidence to suggest that the COM Stadium and the Millennium Stadium have generated mixed and variable impacts on the commercial property market in each city. The exploratory interviews and the questionnaire survey revealed that in addition to the perceived tangible impacts on commercial property values, the stadia have also impacted on the image of

the surrounding area, which according to research participants, may have further influenced the value of commercial property in each city. The research also suggests that the stadia may have enhanced the development potential of the area in which the stadia are located. The following section will present the research findings. However, given the low response rate to the survey, the quantitative data should be viewed cautiously.

Tangible impacts: Commercial property values

From Table 2, it can be seen that from the perspective of property agents and surveyors, the most significant impacts on property values were perceived to be in the commercial leisure sector. In Cardiff, it was suggested that the Millennium Stadium has increased commercial leisure property values by approximately 12%. These findings were supported by the interviewees who typically commented that

...lots of bars and restaurants are a direct impact of the stadium being located where it is (Regional Land Development Director, Welsh Development Agency).

...more commercial leisure – a lot of restaurants opened all on the back of the stadium, a lot of leisure facilities have expanded on the back of the stadium and the numbers of people who just simply come to the games (Chief Officer for Development, Cardiff Local Authority).

[Insert Table 2]

In Manchester, it was also suggested that the largest impact of the COM Stadium was in the leisure sector, with survey respondents suggesting a perceived increase in values of approximately 8%. However, it was also felt by survey respondents and particularly by the interviewees, that the COM Stadium has similarly had a positive impact on the retail sector. Property agents and surveyors suggested that the stadium has increased the value of retail property by approximately 7% in the surrounding area, while a number of interviewees commented that the stadium has given retailers the confidence to invest in East Manchester, with the specific example of Asda Walmart being cited as a direct result

I honestly do not believe that Asda Walmart would have located there and made the investment they have in that retail facility had it not been for the presence of the stadium (Strategic Director for Regeneration, Manchester Local Authority).

While the impacts in the retail sector are seemingly positive, caution should be taken not to over state these results as one interviewee explained '*Retail is very variable depending on location*' (Director, Manchester Regeneration Company). Although the general trends shown by the survey reveal an overall perceived net positive change in the market value of retail property around the stadium, this may disguise more localised negative trends, particularly in the district shopping centre closest to the stadium and the new Asda store.

In contrast to the overall positive impact on retail commercial developments in Manchester, the research found that the construction of the Millennium Stadium

has conversely had a perceived negative impact on the retail sector in Cardiff. The survey suggested that the value of retail property has decreased by 3% relative to other commercial property in the area. The Chief Executive of the Chamber of Commerce explains the reason for this

...the indigenous customer took a long time relatively to get comfortable with the idea that they could still use the city at the same time as the stadium was being used as a venue.

One of the unforeseen negative impacts of the Millennium Stadium was that due to congestion on event days, regular shoppers initially avoided the city centre when the stadium was in use and this resulted in reduced retail trade on event days and a perceived decrease in associated retail property values, as reported by the survey. However, there were suggestions from interviewees that the displacement of shoppers has reduced since the stadium opened, with the Chief Officer for Tourism and Marketing suggesting that there is evidence that retail revenue has almost returned to pre-Millennium Stadium levels. Thus in Cardiff, while there is evidence that property in the commercial leisure sector has experienced positive impacts from the Millennium Stadium, there has seemingly been a cost to the commercial retail sector in the city. Despite this, it was suggested by research participants and Cardiff County Council (2002) that with considered planning and timing of events together with careful management of the number of football events, the negative impacts on retail in the city can be minimised.

In terms of the remaining sectors of the commercial market, the research found that in the case of Manchester, the COM Stadium has impacted on commercial industrial property, increasing values by a perceived 6%, but that in Cardiff there was only a negligible impact. This is likely to be a result of the differing locational characteristics of the case study stadia and due to the fact that the COM Stadium is located on a brownfield site and has derelict industrial property in its vicinity, unlike in Cardiff, where the stadium is located in the city centre and there is limited industrial land usage in the surrounding area.

Finally the research revealed that in both cities the stadia have had negligible effects on the value of property in the office sector, which is consistent with the findings of Sanderson *et al* (2002), who found the 2002 World Cup in Japan and South Korea had little or no discernable impact in the office sector, but in contrast to the Stade de France, which hosted the 1998 World Cup final and is now being utilised as a centrepiece for the growth of an office market (Newman and Tual, 2002).

Intangible impacts: Regenerating image, confidence and pride in the commercial sector

Plumb and McKay (2001: 2) argue that

...real estate impacts tend to be a consequence of decisions driven by other motivations, such as image and self promotion, which provide indirect benefits to the sector.

The research in Cardiff and Manchester revealed that in addition to the tangible impacts on commercial property values, the stadia have also generated positive impacts on imaging and confidence in the surrounding area, which as Plumb and McKay (2001) suggest, may have also indirectly enhanced the commercial property market.

In both cities, interviewees suggested that the Millennium Stadium and COM Stadium have enhanced the external profile and image of the area surrounding the stadia by generating a positive iconic symbol, which is representative of the redevelopment and regeneration of the area. It was suggested that stadia are landmark buildings and in many ways they signify success and the ability of a city to deliver. The research suggested that in East Manchester, the stadium has improved the business image for the area by providing a prominent landmark through its sheer scale and architectural character, in an area that was almost devoid of other landmarks '*...you can see it for miles and it is a destination...*' (Policy Executive, Manchester Chamber of Commerce). It was typically commented that the COM Stadium has transformed the image of the area and

...is sending signals to the wider city and to the investment market in particular about this being the location which has a positive future (Director, Manchester Regeneration Company).

...it has become a new iconic symbol of Manchester as a whole (Strategic Director for Regeneration, Manchester Local Authority).

This was endorsed by a developer in the area who felt that

...the city centre business community has undoubtedly turned its attention eastside and the most notable reason why it did that was because of that stadium (Manchester Developer).

Similarly in Cardiff, another developer explained how the Millennium Stadium has enhanced the external commercial image of Cardiff by producing

...an icon landmark development of no mean feat where others have failed like Wembley has stalled over and over again (Cardiff Developer).

She went on to explain

...it has helped uplift Cardiff's profile...when you have something like the Millennium Stadium helping us to sell Cardiff then we can let things quicker. It does help sell it.

Research participants suggested that as a result of image enhancement, business confidence in the area surrounding the stadium and the broader city has increased. In Manchester, a developer explains how the stadium is being used to engender confidence in East Manchester,

Every time we have a prospective occupier we take them to the stadium complex first and what it does is engender real confidence about East Manchester's ability to deliver rather than talk the game (Manchester Developer).

While in Cardiff, interviewees also noted how

...overall, the stadium has definitely been a catalyst for regeneration. It has given a lot of confidence to business (Chief Officer for Tourism and Marketing, Cardiff Local Authority)

and how the stadium has helped to boost business confidence in the city

...it sends out very positive signals to us as developers that the local authority and other bodies that have been involved in that type of large

scale development have delivered already...it is not going to take years and years and years like the Wembley saga... (Cardiff Developer).

The impact of stadia on commercial development potential

While the main focus of the questionnaire survey and the exploratory interviews was on the impact of the stadia on commercial property values, research participants were also asked about the impact on the development potential of the area surrounding each venue.

In Cardiff, the overwhelming majority of survey respondents (92%) stated that the Millennium Stadium has impacted positively the commercial development potential of the surrounding area. In particular, it was typically commented upon by a number of property professionals that *'the development potential of the immediate vicinity has been enhanced for leisure-orientated developments'* (Property Professional 15, Cardiff), and that

The stadium has certainly raised the profile of Cardiff and assisted commercial sale rates and values; the number of investors that have purchased has increased since the construction of the Millennium Stadium (Property Professional 1, Cardiff)

Although research participants in Manchester were a little more cautious than in Cardiff, key stakeholders and survey respondents felt that the COM Stadium has on balance impacted positively on the commercial development potential of the

surrounding area. Survey respondents commented that the stadium has ‘*opened up new development areas in the east of the city*’ (Property Professional 38, Manchester) and that ‘*the stadium has made the immediate environment the focal point of investment and development*’ (Property Professional 30, Manchester). These comments were similarly supported by the interviewees, for example, the Strategic Director for Regeneration suggested that

...the stadium I think has been viewed by the development community as being a driver for that potential and it is yet to be seen how far that will be taken but the early signs are promising

and further endorsed by a major developer in the area who stated that

I think there is massive evidence of the private sector investment being generated as a result of that iconic piece of development...the stadium has had the effect of refocusing interest... (Developer, Manchester),

Some property professionals felt that the COM Stadium was not the only factor influencing the development potential of the area, citing transport infrastructure improvements as playing a hugely significant role in this, but as others argued ‘*the velodrome made no difference at all – the stadium gave the site the critical mass required*’ (Property Professional 38, Manchester) and although some research participants argued that the development potential and subsequently land value in the area around the COM Stadium may have increased anyway, others felt ‘*the impacts would not have been to such a great extent or happened with quite the speed it has happened because of the stadium*’ (Property Professional 46, Manchester).

Clearly from the research findings presented, it can be seen that the Millennium Stadium and COM Stadium have impacted on the commercial real estate market in a number of ways, many of which are not quantifiable, but which are nevertheless important for developing and enhancing the commercial property market in each city. The conclusion will now address some of the research and policy implications of these findings.

Conclusion

Grand-scale multi-million pound stadia are increasingly becoming an integral part of cityscapes across the UK. These developments are ever more being justified on their ability to create economic development in the surrounding area. However, as the review earlier in the paper illustrated, the evidence base for using stadia for economic purposes is not only contested but little is known about the impact they have on specific aspects of the local economy such as the real estate market. The research presented in the paper investigated the effects of sports stadia development on the commercial property market, an area of research that has received little attention in the literature. In the two case studies examined, the research found evidence from key stakeholders and property professionals in each city to suggest that with the exception of the retail sector in Cardiff, the Millennium Stadium and the COM Stadium have had perceived positive impacts on property values in the commercial sectors. Moreover,

according to research participants they have created a positive image change, together with increased pride and renewed confidence from businesses in the area where the stadia are located, which may have further enhanced perceived commercial property values.

While the findings presented do provide some evidence to support the notion that stadia can enhance the local economy through boosting the commercial property market, there is a need to consider the limitations of the research, which is case study specific and exploratory in nature. Before the findings can be utilised by policy makers, there is a need for further investigation and additional research should be undertaken to build an evidence base for the arguments presented. This may involve examining additional case studies or in the case of the COM Stadium and the Millennium Stadium, collecting further qualitative and quantitative data. In particular, there is a need to improve upon the survey response rate to enhance the credibility of the quantitative data presented and additionally, collect time series data on property transactions in the neighbourhoods adjacent to the stadia. Data on actual transactions would greatly enhance the evidence presented and provide an objective measure to evaluate the qualitative assertions of the interview and survey respondents. However, collecting this information is problematic on several accounts. Firstly, there remains a lack of available detailed transaction data for the specific research areas, which could be disaggregated to take account of other property, locational and environmental attributes. Secondly, the challenge of isolating the

real estate impact of stadia from other regeneration initiatives remains a significant difficulty in deriving meaningful data, as does isolating the impact of new facilities that have been redeveloped on the site of old stadia, such as in the case of the Millennium Stadium. Nevertheless, these challenges need to be addressed in future work if research is to provide valuable information for policy makers on identifying, sustaining and maximising the potential real estate impacts of sports stadia.

In spite of limited evidence, not only with regard to stadia and real estate, but more generally in terms of local economic development and regeneration, there continues to be a positive shift in UK policy towards utilising sports stadia for these purposes. This trend, together with the use of public funding to subsidise stadia and other sporting developments is likely to continue over the next few years leading up to the London Olympics in 2012. To boost the impact of these developments on the local economy and to justify the continued use of public money to finance UK stadia developments, a broader and more comprehensive understanding of the role of stadia in the regeneration process is required. There is a need for rigorous empirical evidence and holistic baseline studies of stadia impact to be undertaken, which will then enable meaningful and wide-ranging longitudinal economic data to be collected to inform sports-led regeneration policy. However, the value of expert opinion and qualitative data for understanding local conditions and the intangible impacts of stadia, as illustrated

by this paper, should not be underestimated and where possible should be considered in future studies.

Without developing a further understanding of the role of stadia in the regeneration process, there is a risk that as in the US, the rationale for developing sporting infrastructure will become one based on a political rather than an economic basis (Lee, 2002). There is already evidence that this is occurring; for example, the 2002 Manchester Commonwealth Games were declared a huge success before they even happened, based largely on anecdotal evidence and hype surrounding the event. A former senior planning officer from Manchester Local Authority explains,

Once you adopt a strategy of pursuing sports-led urban regeneration, politically it is very difficult for it to allow to fail, so what happens is that it gets declared a success, really irrespective of what happens on the ground...

It is vitally important that political will does not get in the way of critical analysis and while local and national government support is fundamental for the success of sports-led regeneration strategies, political influence must not obscure rigorous and detailed assessment of their impact. This is particularly significant for the UK, given the large amount of public and private finance that is committed to developing sporting infrastructure for the Olympic Games in 2012.

References

Austrian, Z. and Rosentraub, M. S. (2002) Cities, sports, and economic change: A retrospective assessment, *Journal of Urban Affairs*, 24 (5), pp. 549-563.

Askham, P. Jones, I. and Henneberry, J. (1996) *The assessment of the impact of the South Yorkshire Supertram on commercial and industrial property values in Sheffield*, Supertram Impact Series Paper No. SIS 31, CRESR, Sheffield Hallam University.

Baade, R. A. (1995) Stadiums, professional sports and city economies: An analysis of the United States experience, in Bale, J. and Moen, O. (Eds) *The Stadium and the City*, Keele University Press, Keele, pp. 277-294.

Baade, R. A. (1996) Professional sports as catalysts for metropolitan economic development, *Journal of Urban Affairs*, 18 (1), pp. 1-17.

Baade, R. A. and Dye, R. F. (1990) The impact of stadiums and professional sports on metropolitan area development, *Growth and Change*, 21 (2), pp. 1-14.

Bale, J. (1995) Introduction, in Bale, J. and Moen, O. (Eds) *The Stadium and the City*, Keele University Press, Keele, pp. 11-21.

Bowen, M. J. (1974) Outdoor recreation around large cities, in Johnson, J. (Ed.) *Suburban Growth: Geographical processes at the edge of the western city*, Wiley, Chichester, pp. 225-248.

Brown, A. (2001) Who wins when stadiums come to town?, *Regeneration and Renewal*, November, pp. 18-21.

Cardiff County Council (2002) *Cardiff Major Events City Centre Displacement*. Cardiff County Council, Cardiff.

Chaplin, T. (2002) *Identifying the real costs and benefits of sports facilities*, Working paper, Lincoln Institute of Land Policy, Florida State University. Available from <http://www.lincolninst.edu/pubs/dl/671_chapin-web.pdf> (accessed 20th April 2005).

Crompton, J. L. (1995) Economic impact analysis of sports facilities and events: Eleven sources of misapplication, *Journal of sport management*, 9, pp. 14-35.

Crompton, J. L. (2000) Designing golf courses to optimize proximate property values, *Managing Leisure* 5, pp. 192-199.

Crompton, J. L. (2005) The impact of parks on property values: Empirical evidence from the past two decades in the United States, *Managing Leisure*, 10, pp. 203-218.

Davies, L.E. (2002) Sport in the city: Measuring economic significance at the local level, *European Sport Management Quarterly*, 2 (2), pp. 83-107.

Davies, L. E. (2005) Not in my back yard! Stadia location and the property market, *Area*, 37 (3), pp. 268-276.

Euchner, C. C. (1993) *Playing the field: Why sports teams move and cities fight to keep them*, John Hopkins University Press, Baltimore.

Henneberry, J. (1996a) *The impact of the South Yorkshire Supertram on house prices in Sheffield*, Supertram Impact Series Paper No. SIS 32, CRESR, Sheffield Hallam University

Henneberry, J. (1996b) *A Delphi study of expert opinion on the property market impacts of transport investments in Sheffield*, Supertram Impact Series Paper No. SIS 34 CRESR, Sheffield Hallam University.

Hobkinson, R. (2002). *What's the story – more than sporting glory? Manchester and the 2002 Commonwealth Games*. Jones Lang LaSalle. Available from <<http://www.research.joneslanglasalle.com/>> (accessed 28th June 2005).

Humphreys, B. R. (2001) The myth of sports-led economic development, *Economic Development Commentary*, 25 (1), pp. 34-37b.

Irwin, E. G. (2002) The effects of open space on residential property values, *Land Economics*, 78 (4), pp. 465-480.

Jones, C. (2001) A level playing field? Sports stadium infrastructure and urban development in the United Kingdom, *Environment and Planning A*, 33, pp. 845-861.

Jones, C. (2002) Public cost for private gain? – Recent and proposed “national” stadium developments in the UK, and commonalities with North America, *Area*, 34, pp. 160-170.

Ladd, J. (2003) The economic impact of sports development, in Ladd, J. and Davis, L. (Eds) *BURA Guide to Best practice in Sport and Regeneration*, British Urban Regeneration Association, London, pp. 7-12.

Lawless, P. (1990) Regeneration in Sheffield: From radical intervention to partnership, in Judd, D. and Parkinson, M. (Eds) *Leadership and Urban Regeneration*, Sage, London, pp. 133-150.

Lee P. (2002) The economic and social justification for publicly financed stadia: The case of Vancouver's BC place stadium, *European Planning Studies*, 10 (7), pp. 861-873.

Loftman, P. and Nevin, B. (1995) Prestige projects and urban regeneration in the 1980's and 1990's: A review of benefits and limitations, *Planning Practice and Research*, 3 (1), pp. 31-39.

Newman, P. and Tual, M. (2002) The Stade de France - The last expression of French centralism?, *European Planning Studies*, 10 (7), 831-843.

Noll, R. G. and Zimbalist, A. (Eds) (1997) *Sports, Jobs and Taxes: The economic impact of sports teams and stadiums*. Brookings Institution Press, Washington, D.C.

Percy, R. (2001) *Planning bulletin, issue ten: Sport and regeneration*. Sport England, London.

Plumb, C. and McKay, M. (2001) *Reaching beyond the gold: The impact of the Olympic Games on real estate markets*. Jones Lang Salle. Available from <<http://www.research.joneslanglasalle.com/>> (accessed 28th June 2005).

Rosentraub, M. S. (1997) *Major League Losers: The real cost of sports and who's paying for it*. Basicbooks, New York.

Sanderson, B., Webb, M. and Hobkinson, R. (2002) *Home advantage? The impact of the world cup on real estate markets*. Jones Lang Salle. Available from <<http://www.research.joneslanglasalle.com/>> (accessed 28th June 2005).

Taylor, Lord Justice (1990) *Hillsborough stadium disaster: Final report*, HMSO, London.

Thornley, A. (2002) Guest editorial: Urban regeneration and sports stadia, *European Planning Studies*, 10 (7), pp. 813-818.

Tu, C. (2003) *How do new sports stadiums affect real estate values? The case of Fedex Field*. Unpublished conference paper. American Real Estate Society, 19th Annual Meeting, April 2-5.

Watkins, C. A. (2001) The definition and identification of housing submarkets, *Environment and Planning A*, 33, pp. 2235-2253.