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Not In My Back Yard! Sports stadia location and the property market

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Abstract

In recent years sports stadia have been built in the UK, not only for their intended sporting purpose but with the twin aim of stimulating economic and physical regeneration. However, proposals to locate stadia in urban areas often prompt a negative reaction from local communities, fearing a decline in property prices. This paper will use a case study of the Millennium Stadium in Cardiff and the City of Manchester Stadium to illustrate that in contrast to this widely held belief, sports stadia can actually enhance the value of residential property. Furthermore, it will argue that stadia also contribute indirectly to property value through the creation of pride, confidence and enhanced image of an area.

Keywords: Sports stadia, impact, residential property, image, mixed method, UK.

Introduction

In recent years, sport has transcended the boundary from being considered as an active leisure pastime to being recognised as having considerable social and economic influence in contemporary society. Not only is sport now considered to be a major global industry, having significant economic impact at various spatial scales, but it is increasingly being utilised to address social issues such as inequality, deprivation and crime in urban areas (Davies, 2002; Gratton and Henry, 2001).

In the UK, the notion of using sport-related developments for purposes other than their intended sporting activity originated in the late 1980s. During this time, several cities used property and enterprise led development policies to build prestigious sports stadia in an attempt to stimulate physical regeneration in declining and deprived urban areas (Jones, 2001, 2002, 2002a; Lawless, 1990; Loftman and Nevin 1995; Loftman and Spirou, 1996). Since this time, there has been continued construction and investment in stadia developments. A number of cities and towns in the UK have built stadia to either host major sporting events, for example The World Student Games, 1991 (Don Valley Stadium, Sheffield); The Rugby World Cup, 1999 (Millennium Stadium, Cardiff); The Commonwealth Games, 2002 (City of Manchester Stadium, Manchester) or in response to the publication of the Taylor Report¹ (Taylor, 1990) and the need to modernise existing football grounds. While the purpose of these developments has been to serve a sporting need, the function of the stadia have been twofold,

with the view that they will also act as a catalyst for economic and social regeneration in the surrounding area.

Although an increasing number of local authorities in the UK are looking towards using iconic stadia developments as a tool for regeneration, evidence to suggest that they can underpin regeneration goals is variable (Brown, 2001; Gray and Bagley, 2003). Most literature that has evaluated the impact of sports stadia is based on the North American experience and primarily analyses the impact on local economic development (Baade, 1996; Baade and Dye, 1990; Chaplin, 2002; Jones, 2002; Lee, 2002; Noll and Zimbalist, 1997; Rosentraub, 1997; Thornley, 2002). However, even within this literature there is little agreement amongst academics whether stadia generate net positive economic outcomes or costs. Proponents argue that they generate jobs, increased commercial activity and subsequent multiplier effects, new tax revenues from businesses, the development of a landmark site, tourism and increased community provision. Critics on the other hand, contend that the benefits of stadia are overstated and they deliver little in economic terms (Baade and Dye, 1990; Baade 1996; Jones, 2002; Noll and Zimbalist, 1997, Rosentraub, 1997).

The social impact of stadia on their surrounding communities has received considerably less attention, yet there is equally little agreement as to whether they can benefit a local neighbourhood. While some argue that they can generate civic pride, community visibility, image improvement and increased

community identity (Chaplin, 2002), others suggest that stadia, particularly those used for football also engender local social costs (Bale, 1993; Bale and Moen, 1995; Churchman, 1995; Federation of Stadium Communities, 2004; Jones, 2001). Congestion, vandalism, graffiti, noise and litter are frequently stated as problems that stadia bring to urban areas and are a common cause of concern for NIMBY (not-in-my-back-yard) campaigners, who argue that in addition to impacting on the quality of life for nearby residents, also cause property values in the surrounding neighbourhood to decline (Tu, 2003).

While policy makers argue conversely that sports stadia generate physical regeneration in an area and despite negative externalities, holistically raise the value of residential property, there has similarly been little research evaluating the impact of stadia construction on real estate value to support this viewpoint. This is in spite of the fact that the development of property and land is considered to be an integral part of the regeneration process. Selective studies have focused on the impact of major sporting events on real estate (Hobkinson, 2002; Plumb and McKay, 2001; Sanderson *et al*, 2002), and in terms of the broader literature there has been some evaluation of property values around different types of sports developments, most notably golf courses and parks (Crompton, 2000; 2001). However, there has been limited analysis of sports stadia development on residential property. A study undertaken by Bowen (1974), concluded that stadia had a price reducing effect on residential property around central London and more recently a US-based study (Tu, 2003) found that there

was a price differential between single-family housing units in close proximity to the Fedex Field Stadium in Washington and those further away. Nevertheless, the latter study revealed that the lower values found next to the stadium existed prior to its construction.

This paper will present evidence to suggest that contrary to widely held beliefs, the construction of sports stadia in the UK can increase the value of residential property in the surrounding area. It will use two case studies of recently constructed sports stadia in Manchester and Cardiff to contest the negative discourse surrounding the impact of sports stadia on real estate value. Moreover, it will argue that sports stadia can actually contribute to image enhancement and community pride in an area, both of which will ultimately increase the desirability of a location. The paper will present qualitative and quantitative research carried out with key stakeholders in both case studies to support this view.

Research Methodology

The Millennium Stadium and the City of Manchester (COM) Stadium were chosen to investigate the impact of sports stadia on the property market for a number of reasons. Firstly, they have several comparable characteristics. Both stadia were newly constructed in the last five years and built primarily to host major sporting events. The Millennium Stadium was built to host the 1999 Rugby World Cup and the COM Stadium was constructed to host the 2002

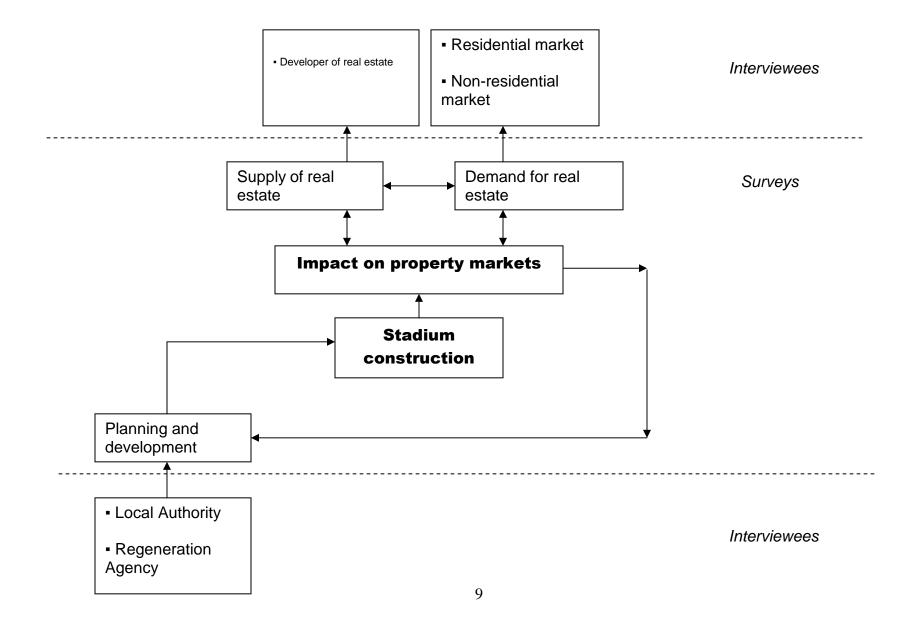
Commonwealth Games. However, they also provided contrasting examples. The Millennium Stadium is situated in the City Centre of Cardiff in the Central Business District, whereas the COM Stadium is positioned approximately 1.6km to the East of Manchester City Centre on a Brownfield site. They thus represent two different locational scenarios (Sheard, 1999; Thornley, 2002). Furthermore, while the COM Stadium was built as part of a larger complex of sporting facilities in East Manchester (Sportcity) and was part of a wider regeneration strategy for the area, the Millennium Stadium was built essentially in isolation from surrounding developments and was not directly connected to other regeneration initiatives in the city.

Given the limited research on sports stadia and property values, there is no recognised method for investigating the property impact of sports stadia. Although Hedonic Analysis has been used widely in other areas of property research (e.g. Askham *et al*, 1996; Antwi; 1994; Henneberry, 1996; 1996a) and was also used by Tu (2003), as a form of mathematical modelling and positivist enquiry, it was not considered to be appropriate for this investigation for a number of reasons. Firstly, Hedonic Analysis is strictly quantitative and it would not have allowed for an exploration of the intangible impacts of sports stadia, such as image creation. 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. Instead, a

methodology was devised that used the expert opinion of property professionals together with the opinions of local interest groups or key stakeholders. A mixed method approach of interviews and a questionnaire survey were used to collect quantitative and qualitative information on the impact of the selected stadia on the property market in each city. The research was carried out in between January and June 2003.

A series of five exploratory interviews were carried out with key stakeholders in Manchester and Cardiff. The interviews were used to allow qualitative examination of the attitudes and opinions of individuals and organisations involved with the strategic planning of the stadium and those affected by its construction. In each city, a senior representative from the Local Authority, the Regeneration Agency, a private developer or construction company and the Chamber of Commerce (representing the non-residential market), together with a member of a local residents' group (representing the residential market) were selected. The rationale for selection of the interviewees is illustrated in Figure 1.

Figure 1: Rationale for selecting key stakeholders



The interviews were approximately 45-60 minutes in duration and the questions asked were structured and open ended. Themes discussed included the role of the stadium in regeneration; the types of development stimulated by the stadium construction; the impact on residential and commercial property; other positive and negative impacts; the sustainability of impacts generated and policies necessary to stimulate further real estate development in the future.

A postal questionnaire survey was carried out with property agents and surveyors and valuers. Property agents and surveyors were selected as they were considered to have expert knowledge of the behaviour of the market and have key influence over property related decisions (Henneberry, 1996). A questionnaire survey was considered to be the most appropriate method to extract quantitative information, while also providing a complement to the qualitative information obtained from the exploratory interviews.

The survey contained four sections: background information about the organisation and the employees; general impacts on the property market; specific impacts on residential and commercial property; development potential and land value and finally wider impacts and sustainability. As with the interviewees, survey participants were specifically asked to consider only the net impact of the stadium on property prices (over and above inflationary rises) and to disregard the impact of other leisure and retail developments in the surrounding area.

All property professionals 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. The response was higher in Cardiff and from surveyors, but overall was relatively low with a total of 57 complete questionnaire returns (15.36%). It was apparent from the large number of returned uncompleted questionnaires that many of the companies sampled were unsure of the impacts and that this accounted for a large proportion of the non response. Spatial analysis of the questionnaire returns revealed a correlation between non response and increasing distance away from the stadium, 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. Further research in this area should therefore consider targeted sampling of property professionals and surveyors in close proximity to stadia developments.

Despite the low response rate, the returned completed surveys contained detailed and extensive information. The majority of the returns were completed by experienced and senior staff. In Manchester, over 90% of respondents were in the senior position of director, partner or manager in their organisation and had practiced for an average of 17 years in the city. In Cardiff, over approximately 81% of respondents held a senior position in their company and had practiced for

an average of 12 years in the city. The sample of data therefore contained information from individuals considered expert in the local property market.

Sports stadia and property value

The research undertaken in Manchester and Cardiff revealed that the stadia in each city have generally impacted positively on the residential property market. The findings suggest that in the case of Manchester, although there is still some uncertainty of both the scale and extent of the impacts, the early signs indicate that the impacts have so far been positive. The research suggested that this uncertainty was due to the short time that had elapsed between the stadium being constructed and the research being carried out, coupled with the fact that the stadium had not operated in its long term capacity as a football ground at the time the research was undertaken. The findings suggest that in the case of Cardiff, there was evidence that the Millennium Stadium has been a key factor in the increased price of property in the surrounding vicinity. In both cases, although research participants estimated the impact of the stadium on residential property prices, it was also commented that it was difficult to isolate the impacts of the stadia from other developments in the surrounding area. Given the methodological difficulty of accurately isolating stadium impact, together with the relatively low response rate to the survey, the quantitative estimates in the following sections should be viewed cautiously.

The City of Manchester (COM) Stadium

Prior to the construction of the COM Stadium, the residential housing market in East Manchester was considered to be in serious decline. Demand for housing stock across all tenures throughout the area was low and in some areas there was no demand at all (Neweastmanchester, 2004). Throughout the area there were large numbers of derelict houses and whole areas were affected by housing abandonment

...what you had was an environment in East Manchester where we had across all tenures and certainly in the Beswick area absolutely across all tenures, a complete failure of the housing market there with both rented and owner occupied. You were looking at terraced properties with effective market values of zero and they were simply not being traded...it didn't have a functioning residential market at all there (Strategic Director for Regeneration, Manchester Local Authority).

Although some research participants were cautious to attribute improvements in the housing market solely to the COM Stadium, there was a general agreement that there has been an improvement in the local housing market since its construction. From a strategic and policy perspective, it was thought that the stadium has at a minimum, stabilised the spiral of decline and in some areas it was considered to have reversed the downward trend

I think what we have seen is prices stabilising and actually beginning to rise in some parts...I would say broadly beneficial I think we are still very much at the beginning of that because we are trying to turn round a quite steep decline (Director, Manchester Regeneration Company).

From the perspective of the market facilitators, the response was varied. The majority of property professionals and surveyors that responded to the survey

reported that the COM Stadium has impacted on the residential property market in the surrounding area, and that it has resulted in an average net positive change of 12.5% to property value over and above general house price increases in the area. Of those respondents, over half thought the impacts occurred within the construction phase of the stadium and the first three months of it opening and 67% of respondents thought that the impacts of the stadium were within 2km of the stadium site. Caution was expressed by a number of survey respondents, who felt that it was too early to establish a quantifiable impact, but they did suggest that there were visible signs of property regeneration in the surrounding area.

One of the purposes of Sportcity and the COM stadium was to create a catalyst for renewal of surrounding residential property. In the interview with a representative from Manchester City Council it was commented

...we always felt that that centre would create around it the momentum for further onward development particularly in respect of kick starting activity around the residential market (Strategic Director for Regeneration, Manchester Local Authority).

One indictor that the COM stadium has impacted positively on the residential market and is starting to achieve its intended purpose was the reaction from the Developer that was interviewed, he explained

...you know Countryside, Bellway, Gleesons on a housing perspective are big players. On the Beswick estate for instance, it was fiercely competed for by all the top names from the domestic perspective. So they have been persuaded – they wouldn't have gone near the place five years ago, I don't think. They just wouldn't have done it. You could have given them the land and they just wouldn't have done it. Now, not only are they paying for it, but they are

building on it speculatively. That is a huge sweep in confidence and Beswick is very close to that stadium, you stand in Beswick and you feel like it is dwarfing you (Manchester Developer).

While strategic stakeholders such as the Local Authority and Regeneration Company were cautious not to overstate the benefits of the stadium, early indications suggest that it has become a factor in the minds of developers in the surrounding area. Nevertheless, at the present time, as highlighted by the Chamber of Commerce, much of the evidence for this is anecdotal and the potential is

...yet to be realised in terms of hard cash – turning into development on the ground and even more so people buying that development on the ground (Strategic Director for Regeneration, Manchester Local Authority).

The Millennium Stadium, Cardiff

In the case of the Millennium Stadium, research participants reported a number of significant impacts associated with its construction. There was a broad and consistent agreement from the key stakeholders and the market facilitators that the Millennium Stadium has impacted positively on the residential property market. Nevertheless, while there was a more widespread agreement of these impacts from research participants in Cardiff, the impacts recorded were smaller than those reported in Manchester. Plumb and Mckay (2001) suggest that direct real estate implications will depend upon the relative size and maturity of the local property market. Therefore as the real estate market in Cardiff City Centre was more established than in East Manchester, the impacts generated were likely to be smaller.

Research participants in Cardiff, as in Manchester similarly commented that it was difficult to attribute residential price increases in the city to the stadium alone. However, the Millennium Stadium was cited by several interviewees as being a significant factor in the revival of property in the surrounding area

...if you look around the stadium the bulk of development has really been residential and that certainly has had an impact in terms of pricing...We are now seeing significant amounts of private, very high quality and relatively high values being put on those properties... which is due to a number of things, but I think the stadium is accelerating (Chief Executive, Cardiff Chamber of Commerce).

Property professionals and surveyors reported that the Millennium Stadium has resulted in an average net positive change of 2.92% to residential property value in the surrounding area over and above general house price increases. Interviewees similarly agreed that the stadium has increased the value of existing residential property in the surrounding area. It was typically commented

If you look at the river bank an area that until four years ago was the red light district ... I mean it really was an area that generally you wouldn't be looking to develop residentially but along the opposite river bank to the stadium directly overlooking the stadium you are now talking about apartments of £300,000 – in houses that were difficult to find tenants for (Chief Executive, Cardiff Chamber of Commerce).

One interviewee suggested that a reason the stadium has impacted on residential prices was

...what it has essentially done has it has brought the town centre in this direction. You know we are just a couple of blocks here from the stadium itself and this whole area including Grangetown, which is actually further down the road, prices have been going up here very quickly (Member, Cardiff Residents Group).

He went on to further explain how the stadium has acted as a catalyst for the renovation of properties and the subsequent price increase of properties in the immediate vicinity

...in this particular area, the stadium is a part of it because...they put new paving down, they fixed up the railings, then we started noticing that some of the old houses on the embankment actually facing the stadium across the river were fixed up (Member, Cardiff Residents Group).

The results from the survey suggest that the Millennium Stadium did not impact on residential prices immediately. Half of the property professionals and surveyors that reported the stadium had impacted on the property market thought that it occurred within the construction phase of the stadium and the first 12 months of it opening. Nevertheless, a further 41.7% reported that the impact occurred between 1-2 years after the opening of the stadium. The time lapse between the construction of the stadium and the increase in residential values reported by the property professionals and surveyors was also commented upon by one interviewee who explained

...as the stadium has become established it has become known as an international building of acclaim and that positive perception has, as it has become better known, its affected the houses, certainly prices have kept going up, we didn't see it immediately (Member, Cardiff Residents Group).

These findings suggest that the COM Stadium may have further impacts on the property market in the future.

The spatial pattern of impacts in Cardiff was slightly different to Manchester. While 53% of survey respondents thought that the impacts were within 1km of

the stadium site, over 30% felt that the Millennium Stadium impacted on property over 5km away. Again it was commented that this was a result of the enhanced profile and image of Cardiff that was generated by the Millennium Stadium. This finding once more suggests that the spatial impact of the COM stadium on property may increase as the stadium becomes established.

The intangible impacts of sports stadia on property value

Percy (2001) argues that in addition to the physical contribution that stadia can make to a community, sports stadia can also affect people's perception of their neighbourhood. Perceptions of place and the perceived desirability of an area can influence property prices. In both Manchester and Cardiff, research participants suggested that in addition to the direct impacts on residential property value, the Millennium Stadium and COM stadium have impacted positively on the image of the areas where they are located. Furthermore, it was felt that they have generated confidence and pride both within the local community and the wider city. Although it was not possible to quantify these intangible impacts, it was nonetheless felt by research participants that these factors have indirectly impacted on residential property values.

The interviews and surveys revealed that in both cities the stadia have enhanced the external image of the city and the internal perceptions of the area in the city where they are located. In the case of Cardiff, a number of survey respondents commented how the Millennium Stadium has helped to put Cardiff on the map

and that media coverage and exposure of the city through the hosting of major sports events such as the FA cup has enhanced the external image of the city. However, as noted by a resident in the nearby riverside community, the stadium has also impacted on how people within Cardiff view the surrounding area

I think peoples' perceptions from outside the community have changed...slowly but surely I think the perception of Riverside has changed and I am sure that the stadium must have something to do with that because of its being in our backyard (Member, Cardiff Residents Group).

In the case of Manchester, although the COM Stadium is yet to become established in the same way that the Millennium Stadium has, the early signs also suggest that it is playing a role in creating a positive image for the city and East Manchester. One interviewee suggested that

It certainly has transformed the image of the area – not only in terms of the images that were portrayed of the stadium in use as far as the region and the national audience is concerned but I think it has also started to transform the local population's view of their own area as being a dynamic and happening place and in that regard it has been an outstanding success (Strategic Director for Regeneration, Manchester Local Authority).

A noticeable impact within both cities was the sense of pride that the stadia developments have generated. In Cardiff, interviewees typically commented that

...it is something which the (local) people are very proud of and that generates confidence and people are proud of the capital city – you are only going to get anecdotal evidence, but I think people look at it and say that is what we are about...(Chief Officer for Tourism and Marketing, Cardiff Local Authority)

And similarly in Manchester, although feelings of pride about the stadium were tied up with the hosting of the Commonwealth games, there was a sense that people in the city were proud of its presence

... it has become a real symbol of pride in the city and even amongst the professionals if you like, people who you wouldn't necessarily say – they are going to be the ones waving flags and cheering – but the impact that the stadium has had as a symbol and the games all packaged together is really profound... (Policy Executive, Manchester Chamber of Commerce)

Research participants commented that the value of generating pride and confidence is a fundamental part of the regeneration process. It was suggested that if people are proud of the area in which they live, they are more likely to invest in their property and this in turn is likely to enhance the desirability of the area and stimulate increased demand for property. In the case of Cardiff, the research indicated that this process is occurring. Positive media coverage of the Millennium Stadium together with its iconic status as the National Stadium for Wales has undoubtedly played a role in generating intangible image benefits in the city. However, it is too early to establish whether the levels of pride generated from the Commonwealth Games can be sustained in Manchester once the stadium has established itself as a football venue. It therefore remains to be seen whether the intangible impacts and ultimately the property effects in East Manchester will be similar to those in Cardiff and this will only be established by carrying out further research in the area in the future.

Conclusion

At the beginning of the paper it was suggested that residents in close proximity to proposed sports stadia often protest on the grounds that the construction and operation of stadia will bring negative impacts such as congestion, pollution and anti social behaviour, consequently causing property values to decline. Although the research presented in the paper has limitations, it has provided some evidence to suggest that in contrast to prevailing assumptions, sports stadia can have a positive impact on residential values in the surrounding area. 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.

In the two case studies discussed, the research has indicated that the stadia have enhanced both the internal and external image of the areas in which they are located and generated an element of civic pride in the local community. These factors are likely to have indirectly contributed to the increased value of residential property found in each area.

Whether the Millennium Stadium and the COM Stadium can sustain the impacts that they have generated remains to be seen. The longer term regeneration impact of sports stadia can depend on their usage after the event for which they were built. Many stadia that have been built for world class sporting events struggle to produce sufficient revenue to sustain annual operating costs after the event. For example, the two main stadia built for the Sydney Olympic Games have both experienced major revenue shortfalls that have threatened their viability in the post Olympic period (Searle, 2002). In the case of the Millennium Stadium, the sustainability of the impacts discussed in the paper are largely

dependent upon future usage and the ability of the stadium to maximise the window of opportunity created by the delayed construction of Wembley Stadium. For those stadia that do secure a long term tenant or usage after the event for which they were constructed, there is a need to consider how this may affect the local community and economy. In the case of the COM Stadium, careful management and organisation of football matches and consideration of the local community are required if the impacts generated in the early stages are to be sustained and the stadium is to act as a catalyst for the wider regeneration of the area. It is likely that the longer term property effects of a football venue in Manchester will be different to those of the iconic national stadium in Cardiff. However, this will only be established by revisiting the case studies in the future.

Although the paper has shown that the Millennium Stadium and the COM Stadium have not reduced the value of residential property in the surrounding areas, NIMBY protestors will require further evidence before they are willing to embrace stadia developments. The research presented is relatively small scale and it only considers two case studies. Furthermore, it has only considered the impacts of stadia on real estate value, which require further detailed investigation. The research has not evaluated the social costs of having a stadium as a close neighbour. Factors such as traffic, noise, litter, congestion, pollution and anti social behaviour can affect the quality of life of those living in close proximity to stadia and policy makers need to give careful consideration to these, in addition to the impact on property prices if the regenerative effects of

stadia are to be maximised and the local community are to embrace such developments. In the case of Cardiff, there is evidence to suggest that this is already taking place

...people were afraid that there would be problems with traffic and litter and so on, we don't really notice it on these streets, it really hasn't impacted......as far as the stadium goes, I mean, I have learned to love it I wasn't a big fan at the beginning but it is a pretty impressive building. Its got very positive connotations, its had a lot of good press, so I think its lent a kind of cache to the area really (Member, Cardiff Residents Group).

The challenge for policy makers in Manchester is to similarly work with and gain community support. However, policy makers may find the challenge of the COM Stadium as a football venue, more difficult than the multi-event, multi-sport Millennium Stadium, where events are held much less regularly and as a consequence the potential for local negative social impacts are greatly reduced.

The aim of the research presented in this paper was to investigate the impacts of sports stadia on the property market in the surrounding area. The study has provided some empirical albeit cautious evidence of these impacts. Obviously a larger and more detailed investigation of this issue is required to justify the use of stadia as a tool for urban regeneration. Wembley Stadium is currently under construction and with London bidding for the 2012 Olympic Games, there are likely to be further stadia developments in the Capital in the near future. For the regenerative effect of these stadia to be maximised it is paramount that policy makers are fully informed of the tangible and intangible impacts that such venues generate. At present this information is not available. However, it is only when residents are confident that these impacts have been considered and polices

have been put in place to manage them, will they seriously contemplate having stadia located in their back yard.

Endnotes

1. The Taylor Report was published following the Hillsborough Stadium Disaster in 1989. It discussed and made a number of recommendations relating to safety at football grounds in the UK. The most significant of these for the design of stadia was the provision of all seated accommodation, which has led to a significant number of stadia relocating or redeveloping their exiting grounds.

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References

Antwi A 1994 *Hedonic analysis of transport infrastructure property effects – The empirical process*, Paper No. 10 CRESR, Sheffield Hallam University

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 1996 Professional sports as catalysts for metropolitan economic development *Journal of Urban Affairs* 18 (1) 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) 1-14

Bale J 1993 *Sport, space and the city* Routledge, London

Bale J and Moen O eds 1995 *The Stadium and the city* Keele University Press, Keele

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

Brown A 2001 Who wins when stadiums come to town? *Regeneration and Renewal* November 18-21

Chaplin T 2002 *Identifying the real costs and benefits of sports facilities* Lincoln Institute of Land Policy, Florida State University unpublished working paper

Churchman C 1995 Sports stadia and the landscape *Built Environment* 21 (1) 6-24

Crompton J L 2000 Designing golf courses to optimize proximate property values *Managing Leisure* 5 192-199

Crompton J L 2001 The impact of parks on property values: A review of the empirical evidence *Journal of Leisure Research* 33 (1) 1-31

Davies L E 2002 Sport in the City: Measuring Economic Significance at the Local Level *European Sport Management Quarterly* 2 (2) 83-107

Federation of Stadium Communities 2004 *Stadium Communities Handbook* (http://www.f-s-c.co.uk/home.htm). Accessed 22 December

Gratton C and Henry I P eds 2001 Sport in the City: The role of sport in economic and social regeneration Routledge, London

Gray D and Bagley L 2003 Regeneration – A stadium for Milton Keynes in **Ladd J and Davis L** eds *BURA guide to best practice in Sport and Regeneration* British Urban Regeneration Association, London 42-50

Henneberry J 1996 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

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

Hobkinson R 2002 What's the story – more than sporting glory? Manchester and the 2002 Commonwealth Games Jones Lang LaSalle (www.joneslanglasalle.com) Accessed 1 September 2004

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

Jones C 2002 Public cost for private gain? – Recent and proposed "national" stadium developments in the UK and commonalities with North America *Area* 34 160-170

Jones C 2002a The Stadium and Economic Development: Cardiff and the Millennium Stadium *European Planning Studies* 10 (7) 819-829

Lawless P 1990 Regeneration in Sheffield: From radical intervention to partnership in **Judd D and Parkinson M** eds *Leadership and Urban Regeneration* Sage London 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) 861-873

Lincoln I and Stone I 1999 Sport and the Northern Economy in *The Case for Sport* The Institute of Sport University of Northumbria at Newcastle, Newcastle 81-131

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) 31-39

Loftman P and Spirou C 1996 *Sports, stadiums and urban regeneration: The British and United States experience* Unpublished conference paper, Tourism and Culture: Towards the 21st Century, Morpeth 14-19 September

Neweastmanchester 2004 (http://www.neweastmanchester.com/home.html) Accessed 27 May 2004

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 LaSalle (www.joneslanglasalle.com) Accessed 1 September 2004

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 LaSalle (www.joneslanglasalle.com) Accessed 1 September 2004

Searle G 2002 Uncertain Legacy: Sydney's Olympic Stadiums *European Planning Studies* 10 (7) 845-873

Sheard R 1999 Sport in the city *The Leisure Manager* April 18-20

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) 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