The impact of mega events on construction planning, processes and performance – Auckland's experience of the Rugby World Cup 2011

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Abstract

Internationally, mega events have been used by cities to enhance their image and improve urban spaces. Cities may be viewed as commodities, particularly when local or national governments are making the pitch for hosting rights of such events. As a commodity, they need to sell themselves, often requiring some change in the way they look and perform. New Zealand's hosting of the Rugby World Cup (RWC) in 2011 created an opportunity for New Zealand to carry out much-needed improvements to the image of the country, the main cities, and Auckland in particular. Of the 48 World Cup games, 15 were held in Auckland, including the semi-finals and the final, as well as the opening and closing ceremonies for the event. The city required significant changes and improvements to local infrastructure, as well as expansion and upgrade of a number of venues, all within a relatively short space of time. This paper looks at some of the transformations that took place in Auckland in the lead up to the Rugby World Cup 2011, and explores the impacts of the event on planning processes and performance in the city.

The paper first identifies the range of projects undertaken as part of the RWC upgrade in Auckland, and then focuses on the perceptions of seven industry representatives who were involved with key projects in the RWC development in Auckland. These individuals all participated closely in the planning and development processes of their respective projects. They have provided their reflections on how the RWC affected their projects, and lessons learnt in delivering within the context of such a mega event. The paper also briefly considers their perceptions of the social and economic impacts resulting from the RWC developments, and the opportunities lost and gained in the process.

Keywords: mega events, urban planning, urban development.

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1. Introduction

Mega events are large scale one-off events, most commonly sports-focused (eg. Commonwealth or Olympic Games or FIFA World Cup) but also extending to large trade or cultural festivals (e.g. World's Fairs or Expos) which attract significant numbers of international participants and spectators, have a profile internationally beyond the region in which they are run, and generate significant global media coverage. Countries or cities bid to host mega events in an attempt to promote their locations and attract investors (Chalkley & Essex 1999). Mega events typically draw a large number of tourists to the host region and generate extensive publicity through media coverage of events, so bidding cities or countries are willing to make huge investments in hosting the event itself, and also make substantial investment to infrastructure related to the event.

1.1 Mega events and urban development

The use of mega events as a catalyst for urban development is an idea that has been adopted by many cities and nations in recent bids for hosting rights. Whereas in the past the focus for mega events has been on the perceived economic benefits from media involvement and resulting tourism and investment opportunities, many studies have found these difficult to quantify, and claimed returns have often been challenged (Dwyer, 2005). Where economic effects have been calculated, their impact has been shown to be small and short-term in most cases, and for a number of events the net economic outcome has been negative. Mega events have however been useful to stimulate urban development, and promoters increasingly frame their pitch in terms of the legacy of improvement and expansion that hosting such an event will deliver (Mills, 2013). Cities which may have found it difficult to justify spending money on 'aspirational' projects as part of their normal operations may use the guise of a mega event to support large capital expenditure. Internationally iconic buildings have resulted from various sporting events or festivals in some locations: the Eiffel tower in Paris, built for the 1889 World's Fair; the original Wembley stadium in London, built for the British Empire Exhibition in 1924; the Maracana Stadium, built in Río de Janeiro for the 1950 FIFA World Cup; the Calatrava Tower in Barcelona, built for the 1992 Olympics; and more recently the 'Birds Nest' or Beijing National Stadium, built for the 2008 Olympics.

Apart from creating opportunities for constructing new sports facilities, mega sporting events can create an opportunity to improve the environment of the wider urban environment (Malfas et al., 2004). The number of participants, officials, media and tourists that are associated with mega events require an efficient transport network, sophisticated media broadcast facilities, hotels, commercial centres and public spaces (Malfas et al 2004, Greene 2003, Hiller 2006). Beyond the development needs of an event, significant urban regeneration has also been hailed as a product of mega events, for example the inner city renewal of Atlanta, USA (1992 Olympics), social integration and infrastructure development in South Africa (FIFA World Cup 2010) and redevelopment of East London (2012 Olympics) Whether these regeneration projects have actually achieved their aims is far more controversial, however.

1.2 The Rugby World Cup 2011

The Rugby World Cup (RWC) is the third largest sporting event in the world, after the Olympic Games and the FIFA World Cup (IRB, n.d.). New Zealand's hosting of the RWC in 2011 began in November 2005 when the NZ Rugby Union won their bid to host the event, allowing less than six years to prepare the country to host an event of an unprecedented scale. This required significant changes and improvements to local infrastructure (transport networks, leisure centres, roads and stadiums) and expansion and upgrade of a number of venues, all within a relatively short space of time. Auckland was particularly affected; although games were held in 12 venues around the country, two of these venues were in the Auckland region, and the opening and closing ceremonies, the semi-finals and the finals were all held in Auckland.

2. Planning and processes

Large scale developments brought about as part of a mega event are subject to strict deadlines, usually entailing "fast track decision making and implementation processes in order to ensure completion of projects on time" (Varrel & Kennedy 2001, p. 3). Because of this over-riding need for on-time completion, there is an increased risk that planning and processes leading to project delivery may infringe on existing legislation (planning regulations), environmental sustainability and democracy (lack of public consultation). Burbank (2002) argues that for a mega event to be successful it will need support from local government, local residents and the private sector. However, because of the scale of mega events and their influence on urban development, even when there is resistance to an event or to its associated projects, the public often ends up having very little input into the planning process. For example, some of the developments that took place prior to the FIFA World Cup 2010 in South Africa were deemed to be of national importance and the public were completely excluded from the decision making (Benit-Gbaffou, 2009).

Mega events present a definite deadline for construction projects (venues and supporting infrastructure) and central and local government may use this as an excuse to forgo the usual application processes (public hearings, consents, environmental and social assessments) and fast track preferred projects to meet up with the deadlines (Malfas et al 2004). Hiller (2006) adds that the process of using public funds or even private sector funding differs in comparison with the normal processes so deadlines can be met and that an event becomes a mega event for the city hosting it when it intervenes in the normal functioning of a city to mobilise resources for the event.

In Auckland, various levels of local and central government became involved in the delivery process for the RWC at different stages of the lead-up, which included involvement in the development of the built environment. Table 1 sets out the timeline of relevant milestones leading up to the RWC 2011.

Table 1 RWC 2011 planning timeline

Date	Event			
November 2005	NZRU wins bid to host RWC 2011			
June 2006	Rugby New Zealand 2011 Limited (RNZ 2011) established as a joint venture, limited liability company, based on a partnership between the Government and the NZRU.			
February 2007	RWC Co-ordination Office established as part of the Ministry of Economic Development (MED) to co-ordinate core Government services to support the tournament, including border control, security, transport and infrastructure.			
June 2007	Wynyard Quarter development began			
October 2007	Minister for Rugby World Cup appointed by NZ Government.			
May 2008	Eden Park upgrade began			
September 2009.	"2011 Group" established by Government (a panel of advisers designated to work with RWC Ministers and the New Zealand 2011 Office)			
November 2010	Rugby World Cup 2011 Empowering Act passed to allow government intervention in standard planning processes.			
August 2011	Rugby World Cup 2011 opening ceremony			

2.1 The research

In order to understand the impact of the RWC on the infrastructure of Auckland, and the associated planning and processes leading to its delivery, an exploration of the experiences, attitudes and perceptions of selected participants was carried out. Seven senior industry representatives were interviewed about the projects they were involved in that were linked to the RWC, and about the experiences of the industry more generally. Projects that were highlighted by participants were within the urban zone of Auckland, mainly the central business district or city fringe.

2.2 Participants

Participants were sought to represent the perspectives of architects and design consultants, project managers, construction companies, and project alliances. These roles were chosen because they represent key stake holders in the industry in relation to the projects developed within the RWC context. Seven of the individuals approached agreed to take part, as follows: two directors of architectural firms, two project managers, a director of a construction company, a public relations/environment manager for a construction alliance, and an engineer.

3. Projects and impacts

Projects in Auckland that were undertaken for the RWC can be divided into two categories. Core projects are those which were essential to the tournament, including work which was contractually required as part of the hosting agreement. These included:

- Eden Park stadium redevelopment
- Eden Park precinct upgrades to rail network, stations, pedestrian access.

Catalyst projects are projects which were either initiated or brought forward to improve the city's image or amenities to take advantage of the increased publicity of the RWC. These included:

- Queens Wharf structural upgrade to the wharf, redevelopment of Shed 10 and construction of 'The Cloud' events
- Wynyard Quarter waterfront developments to create a large public park
- Central Business District streetscape upgrades
- Central rail upgrades
- Newmarket overpass motorway upgrade.

3.1 Schedules and timeframes

Participants were questioned on the extent to which projects they were involved with were influenced by the hosting of the RWC. Participants believed that most of the projects carried out under the auspices of the RWC were within the plans for Auckland's development, but considered that if it were not for the RWC these projects would not have been initiated within the projected timeframes. Participants agreed that "the RWC provided a definite deadline" and considered that overall it was a good thing for the projects.

Table 2 provides a summary of some of the projects that were affected by the RWC. The start date of the majority of projects was brought forward, but the physical design was not changed to suit the event. Most projects were upgrades of existing facilities as opposed to being new construction.

There was some disagreement between participants about whether projects were "fast tracked", with most preferring the term "brought forward", stating that it was only the start dates of projects that were changed and not the process of construction that was sped up. This however was contradicted by their own descriptions of the impacts of the RWC on the planning and construction process. Many used the term "fast track" to talk about the expedited consents process, and again to describe parallel execution of construction tasks adopted to meet the deadline, as opposed to the more usual sequential progression.

Table 2 Impact of RWC on identified projects

Project	New project/ event based	Fast tracked/ brought forward	Upgraded existing project/ facility	Existing plans
Eden Park and precinct	✓		✓	
Queens Wharf (incl. The Cloud)	✓			
Newmarket (SH1) Overpass		✓		✓
Wynyard Quarter		✓		✓
Transport system		✓	✓	
Kiwi Rail		✓	✓	
Streetscape projects		✓	✓	

Several of the projects that were discussed were seen to have "come to a stop at kickoff", meaning that only some phases of the project had been completed prior to the opening of the RWC. Most of these projects were part of the long term plan for the city's development initiated by local government, but the start dates were brought forward. The ongoing development and completion of the further project phases has not been carried out but is still projected. Some of these projects may take a further 10-20 years to complete, as stated by one of the architects interviewed, and dates for the commencement of future work are still undefined.

Mega events are frequently seen by their supporters as a means to bringing forward long term projects that would otherwise have taken a long time to initiate (Malfas et al., 2004). This was clearly the case with the RWC in Auckland. All of the participants considered this to be an advantage for both the city and the construction industry, "Those projects would have happened anyway but just the timing of them may have been slightly different. So the RWC has been positive in that respect in that it has pushed or created an end point for which projects have to be delivered" (Architect).

3.2 Consents and approvals processes

The key benefit identified by all participants was the significant reduction in the time taken by planning authorities to process consents and planning applications. It was evident from the responses from all the participants that processes did alter and help fast track projects. "One of the main things that was changed was the consents and processing time lines. So we basically got a dedicated team in council to help fast track any consent issues. Got rid of the long processing time lines, if you said this was RWC project it got special emphasis on it" (Project Manager).

Several participants identified that other projects that were planned for construction but were not expected to complete before the start of the RWC were either not given consent or were put on hold even after consents were issued. This was done so that no major works would be carried out around the city, both for safety reasons and so that it would not appear as if Auckland was unprepared to host the RWC. Auckland Council imposed a construction

moratorium from mid-August 2011, meaning that all construction work in the city had to be completed by that date, and no work was to take place during the RWC. This impacted many projects and meant companies had to work long hours in order to meet the deadline. Main contractors worked in a more integrated fashion with sub-contractors to reach targets, and a lot of weekend work and overtime was done on some projects.

Specific legislation (Rugby World Cup 2011 Empowering Act 2010) was implemented by the Government to expedite planning and approvals for the event. "Time-critical RWC activities and facilities will require a wide range of consents, licences, regulatory approvals, and temporary waivers ("approvals") that existing approval processes are not suited to address. This is because of the long timeframes needed for some approval processes; the risk of capacity constraints arising within some consenting authorities, given the substantial increase in consent applications that is anticipated; and the likelihood that urgent approvals may be needed to resolve unforeseen circumstances." (Rendle, 2010). Under the requirements of this legislation, the affected territorial authorities were required to provide additional administrative support for processing applications. In addition to this there was provision for the RWC Authority to override normal planning processes to grant approvals where required.

None of the participants were aware of the relevance of this legislation to their roles. However, they had all recognised the unusually fast turnaround period for getting consents on both their major projects and other minor projects and upgrades which would have normally not been approved so quickly, and on reflection considered that the legislation could have been the reason why Council acted so quickly on the consents. All participants agreed that "any project that had the RWC tag on it" was given priority in terms of consents issued over other projects, and the conclusion was that the legislation had been taken advantage of without the knowledge of most stakeholders. "I am not aware of any particular changes to the planning process. Apart from the fact the Government stepped in and took over Queens Wharf and they managed that process. I suppose there was more high level Government influence on the planning processes for parts of the RWC infrastructure" (Architect).

3.3 Planning processes

Because most of the projects involved in the RWC were previously part of the city's development plans or based on existing facilities, there was little controversy around the appropriateness of the urban development that was undertaken. The exception to this was around the redevelopment of Eden Park as opposed to a new stadium development, and the subsequent debate about the rehabilitation of Queens Wharf. The original plan was for an upgraded Eden Park to become the foundation of the RWC match schedule. This was disrupted in 2006 when the Government proposed a new showcase stadium on Auckland's waterfront. Following a brief but intense period of public debate this idea was put aside in favour of the Eden Park upgrade.

Discussion was reignited with the decision to promote a new development of Queens Wharf as "Party Central" for the RWC. The site was bought by the Government and Auckland

Regional Council in 2009 to form a centrepiece for RWC celebrations A public design competition was held, which resulted in the selection of eight finalists. A winner was never chosen, however, because of intervention from central and local government and the decision that the proposed designs were not sufficiently "iconic" to represent the city and country in the RWC events. A redevelopment of one of the heritage buildings on the wharf was then proposed, along with the creation of "a multi-purpose temporary facility named The Cloud" (Key, 2010).

The government intervention in this development was the main cause of negative feeling around the RWC from any of the participants. The possibility of the Government stepping in and taking over was perceived to be a risk not just for this situation but in any of the RWC projects, and was considered to be damaging to the construction industry as it prevented a company from making money as well as showcasing their work, and to the build-up to the RWC as it interfered with the proper scheduling and development processes. "The Shed 10 and the Cloud is a compromise and that is middle thinking and to be honest with you for a city like Auckland it probably shows a dysfunctional relationship between Government and council but at the end of the day every city is faced with difficult decisions, it's just having the leadership to have the confidence to actually make those decisions and be confident that they have made the right decisions and I don't think we have the leadership either at local government or council" (Architect). Decision making was seen to be ad hoc and with no co-ordinated planning process.

Hiller (2006) suggests that the process of using high profile events and public funds to drive development in this way can create a breach with the normal planning processes, as occurred in this particular RWC project. Many participants considered this project to be a missed opportunity with the wrong processes followed for the underlying planning of the development, "If we were pitching to go for the international events, whether it be RWC or Commonwealth games or that kind of scenario, we should have had a lot more forethought" (Construction director).

3.4 Design and construction processes

All participants recognised the impact that the tight deadlines had had on design and construction processes. Consultants had to work quickly to complete designs, and in many cases design and construction processes were done in parallel instead of the more usual sequential approach. Participants considered it to be inevitable that this time pressure had a negative effect on design and construction innovation. One architect identified that most of the projects he was involved with had to be procured quickly and methods of construction had to be ones that had been proved efficient because of the definite finish dates. "There were absolute fixed times for the work to be done so that affected the contractors in terms of organising their labour and materials to be delivered absolutely on time". The potential risk involved in adopting novel approaches, sourcing new materials or even in appointing unfamiliar contractor or sub-contractor organisations was considered too great in the majority of projects. 'The Cloud' development on Queens Wharf was one notable exception

to this conservatism, where the innovative design and construction were made possible through "months of detailed planning and consultation" once the project got underway.

The transport and roading projects had the longest time frames of all the RWC projects, having been in progress for over three years prior to the start of the RWC. Despite the long lead time, the project alliance representative stated that they had to factor all of their planning processes around the RWC dates. To be sure of outcomes, they spent the last two and a half years (prior to the games) having conversations with all stakeholders, to make sure that stakeholder expectations and Alliance plans were in tandem. "We had to make sure that we were totally aware of what was being planned for the Rugby World Cup and that we could terminate our work around those days. Black days, gray days, rainy days, snow days. Nothing could be left to the last minute so all processes were streamlined and ran a tight schedule." (Alliance representative).

3.5 Urban environment

The land selected for development as a result of mega events is often obsolete or deteriorating, and such events have been seen as a potential to aid in the transformation or regeneration of the urban environment (Hiller 2006). Central city locations are preferred over distant suburbs because hosting such events requires visitor infrastructure to be put in central areas or maybe refurbished (Hiller 2006). Again, this point was illustrated in Auckland with the development of the waterfront in particular. The "tank farm" that was part of the Ports of Auckland prior to the development of Wynyard Quarter was considered an eyesore, whereas "now with the restaurants and playground it has given Auckland a new life. I think it's all come together and I think it's all a critical mass and I think Auckland has greatly benefitted from that." (Architect).

D'Arcy (2006) suggests that developments resulting from mega events are likely to alter the advantages of certain areas in the city, with rezoning resulting in land values and property prices shifting. He goes on to say that is vital that investment in infrastructure is done in a way that does not hinder the progress of established areas. Malfas et al. (2004) also points out that development undertaken in order to host a mega event may hinder other projects, because so much of the available funds or resources are channelled into one city or a limited focus of development. This concept was touched on by one of the participants in relation to the size of the investment into Eden Park stadium and precinct, noting that, "I still don't think it's a good idea, having a stadium in suburbia was never a good idea...the entire infrastructure was downtown." (Construction director). However, in general the participants were positive about the resulting development of Auckland. The investment was seen as sufficiently diverse that there were benefits to many parts of the city, particularly in relation to transport improvements, "Transport systems were improved and in the long term they will be still used. The trains have been upgraded and soon will all be electrified. The motorways were upgraded again, something that will beneficial in the short to long term." (Engineer).

As claimed by Essex and Chalkley (1999), mega events may help to strengthen regional traditions and values whilst increasing local pride and community spirit. This was certainly

the over-riding opinion of the development undertaken in Auckland for the RWC. "I overheard somebody saying "this is great, it's just like being abroad, like being in a proper world class city." (Architect).

4. Conclusions

All of the development projects that took place in Auckland during the time between the RFU winning the bid to host the RWC and the start of the tournament were in some way affected by the RWC. The majority of projects highlighted as RWC developments were already part of the city's long term development plans, and the hosting of the RWC brought forward their timelines. Projects were completed in a much shorter timeframe than would otherwise have been the case, and several of the projects would have taken another 10 years or more to come to fruition.

In order to meet tight deadlines, planning, design and construction work was carried out in parallel rather than sequentially. Procurement processes had to happen more quickly and consultants were on the jobs sooner. Council improved the turnaround time of planning and consenting processes significantly, and project participants also improved their performance. In most cases, projects stayed with well-established design concepts, methods of construction and known construction contractors and sub-contractors. A lot of overtime and weekend work was required in order to deliver projects as required.

Few negative impacts were identified, but most were focused on the development process of the Queens Wharf regeneration, the only project which was not already part of the city's plan or based on an upgrade of existing facilities. All of the interviewees were critical of the Government's intervention in this project, which they considered to have complicated the planning process unnecessarily and to have had a detrimental impact on the time and choices available to Auckland in making choices around use of the waterfront. This project was seen as a missed opportunity. It is interesting to note that the only other negative point made, that the tight timeframe imposed by the RWC deadline reduced creativity and opportunities to explore innovative design or construction solutions, did not apply to the Cloud development which was seen as original and inventive.

On the whole, the impact of the RWC on Auckland's performance while hosting the tournament and on its contribution to the city's future was seen as extremely positive. The resulting urban development was regarded to be "world class". The planning and associated processes were also considered to have been very successful and operated well within the time constraints imposed.

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