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**Not too late to learn from the
Sydney Olympics experience:
Opportunities offered by
multimodality in current transport
policy**

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TITLE: **Not too late to learn from the Sydney Olympics experience: Opportunities offered by multimodality in current transport policy**

ABSTRACT: Sydney is the Australian city that attracts the most global attention with its beautiful harbour, its iconic attractions of the harbour bridge and opera house. Tourists may leave Sydney with a complimentary view of Sydney's public transport but the Sydneysider's assessments of Sydney's public transport system is often much harsher, especially if the journey requires travel beyond the immediate centre of the city.

In Sydney, the reference point of what constitutes a functioning transport system is informed by the success of the transport system in meeting the needs of the participants and observers at the Olympics in 2000. Changes to the transport system to provide more multimodal travel were supported by Sydneysiders and visitors and this paper analyses why this success has not been translated into everyday public transport.

The analysis of the paper allows the opportunities which still exist for Sydney to benefit from the success of the Olympics to be highlighted. These opportunities involve strengthening the opportunities for, and acceptance of, multimodal trips by the travelling public.

KEY WORDS: *Sydney Olympics; Transport planning; Policy learnings; Multimodality*

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1. Introduction

“The test now, says Mr Carr, is in how we exploit the advantages.

First, there's the home front. The Transport Minister, Carl Scully, for instance, has been asked to provide the Premier with a report on whether changes implemented in his portfolio for the Games might be kept in place.”

(Humphries, 2000)

Sydney is the Australian city that attracts the most global attention with its beautiful harbour, its iconic attractions of the harbour bridge and opera house. Visitors to Sydney encounter a vibrant city centre with a mix of public transport options and a bus and train network that connects users with the beaches, mountains and other attractions. Tourists may leave Sydney with a complimentary view of Sydney's public transport but the Sydneysider's assessments of Sydney's public transport system is often much harsher, especially if the journey requires travel beyond the immediate centre of the city.

To travel further afield into the suburban areas of Sydney requires a greater reliance on multimodal and interconnected trips. Transferring between or within public transport modes can deter individuals from viewing public transport as a viable alternative to the car. This creates a dilemma for new transport infrastructure proposals that expand the connectivity options across the existing public transport network but require the travelling public to be willing to interchange.

In Sydney, the reference point of what constitutes a functioning transport system is informed by the success in meeting the transport needs of the Olympics in 2000. In 2013, Sydneysiders still talk of this success. As a result the Olympics provides an interesting case-study as to why such a success, mainly predicated on multimodal travel, has not been translated into everyday public transport.

This paper argues that opportunities still exist for Sydney to benefit from the success of the Olympics, particularly in relation to increasing the acceptance of multimodal trips by the travelling public. The next section of the paper summarises the literature in relation to multimodality and highlights the features which travellers find important in making such journeys. This literature summary is followed by background to the organisation of transport in Sydney and outlines the transport preparations and organisation for the Olympics in 2000. The third section considers the reasons for the success of the Olympics not being transferred into everyday travel before considering the opportunities today where the success of the Olympics still has relevance. The final section concludes the paper.

2. Multimodality

Multimodality and inter-modality are used, almost interchangeably, to describe the use of more than one mode to complete a transport journey. In practice, multimodality is more often used in the passenger context with inter-modality more commonly used in relation to the transport of freight. This paper is concerned with how people travelled to access Olympic venues in Sydney in comparison to travel today in Sydney. Sydney is a car centric city that nevertheless benefits from a number of modal options in public transport (train, bus, ferry and light rail). As identified in the introduction, more than one mode is necessary to access many destinations using public transport in Sydney.

All multimodal trips require interconnections or interchange. There is a significant literature that discusses the nature of interchange, which are summarised by Terzis and Last (2000), as cited by Neilson *et al.* (2005), and quantified using international literature in Balcombe *et al.* (2004). Generally, the travelling public dislike interchange with the value of time spent in interchange being perceived as longer than in-vehicle time and, in situations where there is no integrated ticketing, passengers understandably disliking financial penalties for transfer. Interchange is most often discussed in terms of movements between two public transport vehicles but good interchange facilities are just as important when accessing public transport whether this is by walking, cycling or by car. Private cars are a common means of accessing public transport in Sydney as evidenced by the demand for parking and 'kiss-and-ride' facilities at train stations and ferry wharfs.

Cities where multimodal trips are the norm and accepted by passengers have typically worked hard to make interchange as easy as possible for passengers and the provision of multimodal tickets is often seen as a prerequisite for this. Planning for public transport where interchange is not assumed to be a constraint means more efficient networks can be built, offering higher frequency services for a given level of subsidy (Neilson *et al.*, 2005). In other cities, network planning is predicated on providing direct journeys for as many of their passengers as possible. These cities do not often benefit from multimodal opportunities. Sydney is an interesting case here. In Sydney there is a planning focus on the provision of single seat journeys, particularly for bus services where there is a financial penalty in addition to the time penalty for changes of bus to complete a journey. Many of the more central bus routes have simply replaced former tram routes and this has led to a bus network with converging routes that create unnecessary congestion along the bus corridor.

Journeys described as multimodal usually suppose that a uni-modal trip does not exist. The use of multimodal to describe trips usually excludes those trips which involve a transfer on the same mode within these trips: such trips are referred to as interconnected trips. However, from a planning policy point of view, both interconnected and, multimodal trips all require interconnections in the transport network for efficient journeys to be made.

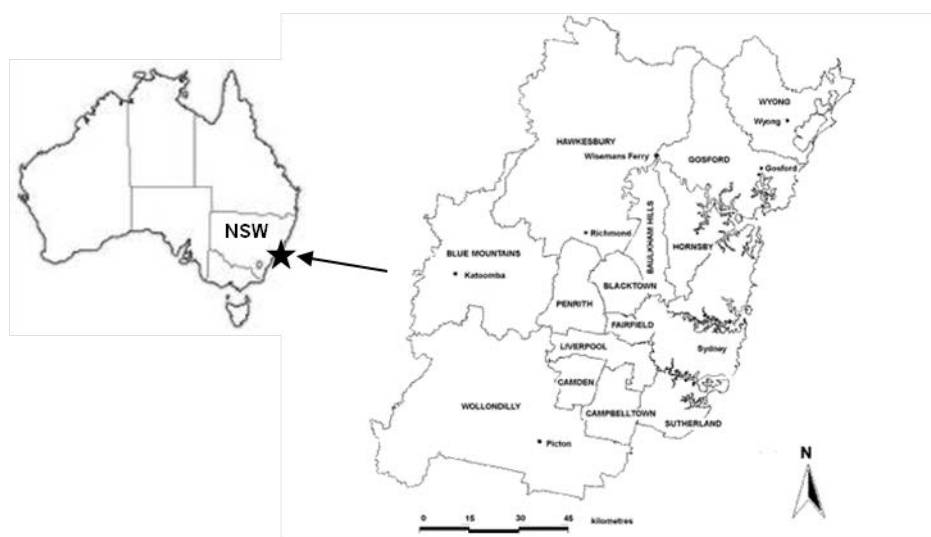
Institutional practices are important in determining whether successful multimodal trips can be undertaken in a given city. Better interconnections occur when there is co-operation between all the public transport providers working under a single organisational, regional authority. A single authority allowing land-use and transport planning to be combined in a co-ordinated way without the potential conflict that can occur through distributed responsibility provides more successful integrated transport. Ideally, this single authority should be regional in coverage (where regional should importantly cover the city's labour market). The geographical coverage of a regional body will depend on the country under consideration but should be big enough to include all typical journeys so as to minimise

cross-border issues. Whilst best practice in promoting multimodal trips is more easily achieved with a regional authority, the presence or absence of a single authority does not spell disaster if good co-ordination between the responsible bodies is achieved. In practice, however, good co-ordination between many bodies responsible for different aspects of a transport network, with different political figureheads, is unlikely to deliver a co-ordinated message (Neilson *et al.*, 2005).

3. About Sydney

1.1 Sydney and its public transport

Sydney is located in the state of New South Wales (NSW), Australia (Figure 1)¹. Sydney's public transport has a suburban rail network as its backbone, with buses providing the spatial coverage although there are considerable areas of Sydney which have no access to train and are completely reliant on bus services. In the more central parts of Sydney, bus routes traverse the routes of the former trams even though in some cases these overlap rail services. One short section of Light Rail exists, created from the conversion of a previous freight corridor with plans well underway for extending this corridor. An extensive ferry network provides connections across the harbour and mitigates, to a certain extent, the existence of the one harbour crossing provided by the iconic Sydney Harbour Bridge. At the time of the Olympics, each of the modes were planned by separate organisations. Timetables were not typically harmonised and, whilst the Government set fare levels for each mode, these were not based on a common scale nor were the tickets transferable between modes.



Source: (Mulley and Moutou, 2012)

Figure 1: The Sydney metropolitan area in relation to New South Wales, Australia

¹ Australia is a federated nation of states and territories. In practice, the national government, known as the Federal Government has not taken much part in public transport decisions which have been undertaken by State Governments but has instead focussed on aspects that require national co-ordination such as vehicle standards, urban freight and freight corridors (rail, road and port) of national significance

In Australia, the tradition is for the planning of land use and transport to be separated at the State Government level. Whilst this paper is focussed on public transport, the interaction between land use and transport means that issues of planning cannot be completely ignored. Local government in Australia also plays a role in the provision of infrastructure and land-use to support transport planning but this tends to be more of an advocate role since they do not typically have the power or financial means to implement more than the provision of street furniture at bus stops, parking strategies, signage and zoning of local land use.

4. Sydney's Olympics

The Carr Labor government, elected in 1995, inherited the Sydney 'green games' Olympic bid won by the Fahey Coalition (Liberal-National parties) government in 1993. The Labor government had not been in power for long before it became clear that transport could become an acute embarrassment to the Olympic organising committee as was being demonstrated in Atlanta at the 1996 Olympics.

Although Sydney is Australia's first and best-known city, staging the Olympics was expected to bring unprecedented international attention. The promise of a 'green games' provided a challenge which was met through a holistic approach of linking land use and multimodal transport activities with a central role for public transport to link the new venue proposed at Olympic Park and a number of other venues spread across the city. Public transport has been the central planning concern of Olympic Games – not just in Sydney – as well as being the focus of most post-Olympic Game analysis (see for example Hensher and Brewer, 2002; Cashman, 2006; Bovy, 2007).

To avoid the widely regarded disastrous transport experience of the Atlanta Olympic Games and to secure a positive outcome for Sydney, the Labor Government put in place special governance and departmental arrangements. These initiatives permitted a high-level integration of land-use and transport planning that resulted in a high quality transport service delivery. Alongside the planning, a sustained effort to cultivate public expectations about the disruption to the road network and the necessity to use public transport was undertaken (Olympic Roads Transport Authority (ORTA), 2001).

Of the different modes in Sydney, the train system carried the heaviest load of Olympic passengers. Patronage on a daily basis generally exceeded the revised (undated) forecasts for the rail system as a whole (Hensher and Brewer 2002) which provided approximately 50% more trips than usual for a day and created a definite spike in the annual patronage figure (IPA 2012, p 27). Many of these journeys would have been multimodal given the role that the private car and to a lesser extent bus plays in Sydney for passengers to access rail stations. Patronage on the bus system during the Olympics was not much higher than usual. But whereas many bus passengers would normally be school children, during the Olympics the buses provided services for those travelling to Olympic venues as the schools were on holiday. Also, buses being flexible meant that many bus routes were either cancelled or rerouted to better serve Olympic venues with a large contingent of buses from regional areas brought in to Sydney to provide special Olympic services (Olympic Roads Transport Authority (ORTA), 2001; Hensher and Brewer, 2002).

5. Factors making the Sydney Olympics a success

5.1 *Institutional changes facilitating multimodality*

In Opposition, Labor had been fiercely critical of the preparations for the Olympics which were positioned within Premier Fahey's own portfolio. On taking office, Labor created a dedicated Ministry for the Olympics with Minister Knight as Minister for the Olympics. Initially the functions of the Ministry and the supporting department Olympic Coordination Authority (OCA) was considered part of the Recreation and Culture portfolio. This expanded to include transport functions in March 1997 when Premier Carr announced that the Olympic Roads and Transport Authority (ORTA) would become the statutory body, reporting directly to Minister Knight (State Records, no date). ORTA was constituted in December 1998, tasked with delivering a fully integrated and coordinated transport strategy for the Games (New South Wales Government, 1998).

It was strategically significant that ORTA was placed outside the Transport and Roads portfolios (and the OCA). The transport chaos of the 1996 Atlanta Games identified the need to have a single agency to coordinate the transport planning and service delivery backed by the "resources and authority to solve the problems as they arise" (Olympic Roads Transport Authority (ORTA), 2001). The then Ministry of Transport (MoT) thus lost Olympic transport planning responsibilities, and a new team of expertise were developed through the secondment of selected staff from the public service from different departments together with specialist appointments. As identified by the literature, multimodal systems need more co-ordination than unimodal systems and co-ordination is very much easier to undertake if only one body has responsibility: this institutional change therefore provided Sydney with the best possible opportunity for success with public transport for the Olympic Games.

The run-up to the Olympics was not free of transport controversy for ORTA and anxiety was high that transport would be a source of national embarrassment (Evans, 2000). The possibility of transport gridlock on both roads and public transport was used to manage expectations about travel times. Train derailments, missing bus fleets and bus crashes in the run up to the games did not help (Wainwright, Contractor and Woodford, 2000; Hensher and Brewer, 2002). ORTA faced problems related to the coordination and management of resourcing on the ground but most of the criticism was directed at the transport agencies, with the highest level casualty the head of the Department of Transport who was "sent packing" two days before the Olympics were to start (Moore, 2000).

5.2 *Network and resource planning strategies*

There were a number of strategies used to help Sydney's transport network to cope with unprecedented volumes of visitors whose peak travel would be orientated around time-sensitive Olympic events. ORTA proposed and implemented a multimodal (train/bus/ferry/car) hub and spoke design to connect the Olympic venues with the cultural precincts as well as to connect areas that did not have pre-existing public transport. The new train line extension that opened in 1998 was an important means of moving people to Olympic Park itself but other modal options such as bus services, ferry, taxi and a car fleet for transferring officials and VIPs were developed as part of the plan. 'Park-and-ride' facilities were established, and Olympic Lanes, clearways on major road corridors plus a day-time curfew for freight were enforced to ease traffic congestion on the road network. Tickets for the events included a ticket for selected public transport, making the marginal cost of using

public transport zero. It was however a crude version of a multimodal ticketing system since the tickets were too large to be read in the automated ticket validation machines and required staff resources to visually check tickets. Forward planning, financial resources, wide-ranging powers to compel the cooperation of transport operators and the public helped to make Sydney a city with a 24-hour public transport system with 'almost' free and accessible public transport for travelling to Olympic events (Olympic Roads Transport Authority (ORTA), 2001).

5.3 *'Marketing' strategies*

The pre-Olympic travel information was customised for different areas of Sydney, and purposefully limited car parking opportunities to the 'park and ride' facilities (New South Wales Olympic Roads Transport Authority (ORTA), 1999). This marketing worked. The large number of Sydneysiders attending Olympic events uncharacteristically got out of their cars and used public transport. The 4,452 million trips were made by public transport with 76 percent by train, and 24 percent by bus.

ORTA leveraged the community's anticipation wide scale disruption to everyday life to convince people to use public transport to travel to Olympic events. The public were repeatedly told to expect substantial travel delays, take public transport, to travel early, and be patient. During the event, public transport patronage was high, passengers good-tempered and crowding was manageable and the demonstrated that the public is willing to adopt travel behaviour change if the message is suitably compelling. This marketing strategy of 'doom and gloom' has been used in all the Olympics after Sydney with considerable success.

6. Factors mitigating multimodal success post Olympics

After the Olympics and Paralympics which followed, transport services returned to normal (as did travel behaviour even if the memory of the success has been more long lasting). There are a number of reasons why the multimodal success of the Olympics has not been transferred to everyday life for Sydneysiders. This section considers four main areas contributing to this lack of transfer: institutional changes and transport plans, the removal of a single co-ordinating body, the lack of integrated fares and ticketing and the attitudes the travelling public.

6.1 *Institutional change*

ORTA showed the importance of co-ordinating land use and transport planning, backed by powers to make it happen. Although it was clearly an intention by Premier Carr and the Transport Minister Scully, to implement changes modelled on the success of ORTA, these did not come to effect quickly enough – if at all (Humphries, 2000; Moore, 2000). As intended by the legislation that constituted it, by June 2001 ORTA ceased to exist (State Records, no date). Staff had returned to their substantive positions and as a result, knowledge and experience of multimodal public transport and links between land use and transport planning was dispersed into the different agencies within NSW and with its dispersion came dilution.

After the Olympics, the Labor Party continued to govern NSW for another 11 years. Their 16 year period in power (four, four-year terms) suggests a level of stability conducive to progressing long-term strategic policy issues, such as transport. This was not to be the case.

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The Ministerial portfolios were subject to more change, with six different Ministers for Transport and eight for Roads over the course of the Labor government. This high turnover of political leadership was not uncommon with many portfolios experiencing similar upheaval. For transport, however, this high turnover did not provide the much needed continuity of policy priorities or political champions that are required for the successful implementation of transport projects that are capital intensive and slow to build.

Transport plans are the way in which the Government signals to the travelling public how policy is to be implemented by the public servants. Infrastructure and mechanisms such as park-and-ride or ticketing translate these plans into reality. Clear signals of the way in which the public transport network can be more utilised through multimodal approaches have not been a feature of the government message in Sydney despite the way in which a major strategic transport plan has been published under each NSW State Premier of the Labor administration, with the exception of Premier Rees who lost a leadership challenge on the eve of his Transport Blueprint announcement. These are schematically shown in Figure 2. The Transport Blueprint was subsequently released as the *Metropolitan Transport Plan* in February 2010 - the first plan to be formally integrated with the land use plan for NSW (NSW Government, 2012).

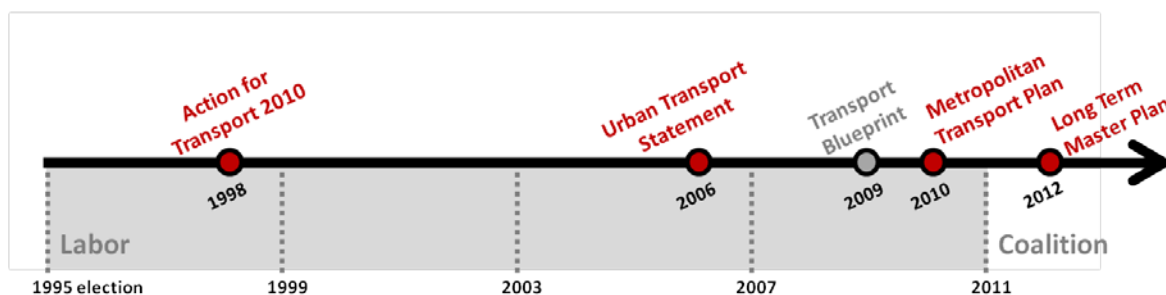


Figure 2: Timeline of strategic transport plans (published and unpublished)

Source: this research

Despite these plans which acknowledged the benefits of multimodalism to different degrees (Mulley and Moutou, 2012), the Labor government faced increasing media pressure from adverse public transport events. From 2007 this Labor government became associated with project cancellations which culminated in public belief in newly announced projects being severely tested. The major issue with all the plans was how they might be funded – major infrastructure plans are expensive and long-lived and fare badly in the evaluation methodologies typically accepted by governments. By the time a new Coalition Government were elected in 2011, the transport portfolio was regarded as a political ‘hot potato’ and any institutional changes which would have facilitated successful multimodal travel had not been put fully in place.

6.2 Single authority for co-ordination

The successive leadership changes noted in the previous section were coupled with successive organisational changes (and associated name changes) in the government departments responsible for NSW policy on land use planning and transport. The responsibilities for planning functions have remained largely separate from transport strategic and operational functions and, whilst the repeated reorganisation of the government agencies was designed to improve governmental effectiveness, it did not bring any greater co-ordination between land

use and transport planning. Moreover, the organisational changes caused disruption that weakened corporate knowledge and the networks that effective policy making relies upon. The lack of a single authority, as highlighted in the literature review, is a significant reason why the multimodal success of the Olympics did not continue.

6.3 *Failure to implement integrated fares and ticketing*

As discussed above, tickets for the Olympic events included a ticket for selected public transport to reach the event. This set the stage for an understanding of the importance and relevance of multimodal fare systems and ticketing. Whether or not the result of the Olympic experience, the need for multimodal ticketing options was acknowledged in Sydney as far back as 1992 when an automated ticketing system to modernise fare collection and combat fare evasion was introduced (Parliament of New South Wales, 1992). The introduction of different coloured ‘TravelPass’ card products at that time provided a multimodal periodical ticket option for parts of the public transport network. However, these periodic tickets were limited by not being recognised for use on the significant part of the network provided by private bus operators.

The importance of making multimodal travel appealing through integrated ticketing was clearly demonstrated from the Olympic experience. In the Action for Transport (NSW Government, 1998) an integrated ticket was planned to be in operation by 2002, which later transformed into plans for a multimodal smartcard – branded the T-card. The commissioned ticket was intended to be a network wide product but this exercise ended in court, following the NSW Government’s cancellation of the contract. A major obstacle to the project’s successful completion was the inability to reproduce the 500 plus different fares which existed at that time in Sydney in the back office system of the card. In addition there was not the political will to streamline the fare system until 2010 when the MyZone system was introduced. MyZone’s greatest contribution to multimodality has come from the way these tickets can be used throughout Sydney on the services of both government and private transport operators (Graham and Mulley, 2012). The simplifications to the fare and ticketing systems achieved through MyZone have also helped to make the next reform, an integrated smart card (the ‘Opal’ ticket), a viable proposition. The fully operational ‘Opal’ smart card is yet to come to Sydney although trials have started on ferry and train services with plans for full rollout to these modes by the end of 2013. This is slow progress in the creation of a multimodal capable ticket in contrast to the commitment and success of the ticketing made available during the Olympics.

6.4 *Public unable to transfer willingness for multimodality into everyday travel*

Although more than a decade has passed, the success in meeting the transport needs of the Olympics remains the reference point of what constitutes a functioning transport system for the public and transport planners in Sydney. From the travelling public’s perspective, there are a number of features that define the travel experience during the Olympic period. There was less car traffic on the road network and therefore shorter bus and car commuting times (although this is acknowledged to have benefited from the Games coinciding with school holidays and shutting of various businesses). There was high levels of customer service and unprecedented ‘friendliness’ due to the presence of Olympic volunteers at transit points who acted as ‘way-finding’ guides. There were new trip options with the opening of the suburban park-and-ride sites connected by bus services, and almost 24 hour train services which both

contributed to the seamlessness of multimodal public transport trips. The scale of the public's willingness to take multimodal trips during the Olympic period has not been seen since.

During the Olympics, the willingness of passengers to adopt multimodal journeys was encouraged by the provision of park and ride facilities, despite the existence of purpose built parking close to the Olympic sites which were then used exclusively by event organisers and officials (and now used by ticket holders of special events). On the one hand this played to the idea of doing part of the journey by car and reflected the reality of the travel behaviour patterns of Sydneysiders. On the other hand, the provision of park and ride underpinned the reality of not being able to make door to door by public transport. In the case of the Olympics, the 'ride' was normally from the 'park' direct to the Olympic venue thus recognising the unique trip generation nature of the Games. After the Olympics, all dedicated park and ride schemes were removed. In a new format, park and ride have been funded from the Parking Space Levy and are centred around train stations for commuters. This reflects the difficulty of making park-and-ride schemes part of the multimodal trip, other than for the commute, because of the multiple destinations to be accessed by public transport after parking.

7. The present day opportunities that keep the Sydney Olympic experience relevant

Changes have been made to the institutional framework that are more likely to see the development of a successful multimodal network. In the final year of the Labor administration's 16 year rule of NSW, a new 'super department' of transport was created which began by being responsible for strategic transport policy development and operational activities such as network planning for all modes and the whole life cycle of transport capital projects (scoping, feasibility, procurement and delivery). This quickly evolved to a single authority covering policy and planning for all modes with the election of the O'Farrell Coalition Government in 2011. The design of this single agency has required the splitting of a number of different organisations in to 'policy and planning' and 'operational' functions. This reorganizational process, has again generated significant disruptions in staffing, unclear ownership of policy areas particularly where there is overlap and the loss of corporate knowledge. Nevertheless, the first planning document to emerge under the new administration, the Long Term Master Plan released in December 2012 (NSW Government, 2012), shows more co-ordinated land use and transport planning thinking and agnostic modal planning than in the past.

Two ministerial portfolios have been retained for this single 'super department', maintaining a long-standing NSW tradition of having Roads portfolio separate to that of (public) Transport portfolio. Although more difficult, two Ministers can still champion a unified policy agenda for the single agency though this is still to be realised in NSW as new road-building projects still compete with investments to public transport. The ability of individual politicians to champion and deliver improvements largely relies on how they and their portfolio are regarded within their respective parties. Early indications are that the Premier's and Minister for Transport's personal commitment to public transport may be strong enough to maintain political momentum for prioritising public transport over road projects aimed at private car travel.

Delivering public transport improvements within the first 100 days of entering office has helped to raise public confidence in the Minister for Transport (Parliament of New South Wales, 2011). This included the extension of the multimodal periodic ticket options of the MyZone and pensioner fares to include travel on the privately operated light rail line, and conducting feasibility studies to further extend Sydney's light rail network. Although a long-time in gestation, the smartcard integrated ticketing system, 'the Opal' card is finally becoming operational and will make it easier for passengers to take single multimodal trips.

Beyond travel to special events, Sydneysiders remain attached to their car as their mode of transport despite prolonged traffic congestion on weekdays and weekends. To fully realise multimodal opportunities for travel requires the public to accept transfer between modes. Although public transport patronage in Sydney is high relative to other Australian capital cities, the cultural preference for single-seat car travel remains a sticking point with no real sign that this will change without concerted policy intervention in the form of real incentives and marketing of new expectations on the one hand and the changing of the network forcing interchange on the other.

8. Conclusion

The transport for Sydney's Olympics was regarded as a success with Sydneysiders who – more than a decade later – are still using it as a relative reference point for good public transport. The creation of the Olympic Roads and Transport Authority (ORTA) as a statutory body masterminded the plans. This institutional framework is a good example of vesting the power to plan and co-ordinate within a single body to successfully deliver multimodal public transport.

As important as the delivery of services, ORTA was successful in bringing about a change in transport behaviour for the Olympic period. ORTA leveraged the community's anticipation of wide scale disruption to everyday life to convince people to use public transport to travel to Olympic events. The outcome was widely regarded as a success and has been transferred well to special event transport in Sydney. But this experience has not been scaled up from the special event to everyday travel behaviour. Successive transport administrations have failed to learn the lesson of how to bring the public onside to play their part in making multimodal public transport a real travel alternative for Sydney. For this to happen, the public need to believe that this is in their interests and that adapting and changing is in their interests too. The government has a role in this which is to be clear about the rationale of their policy, in particular the arguments of sustainability in modern transport policy show an understanding of the role of multimodality in achieving this.

The expertise in planning and managing special events and associated human resources have become a lasting legacy, strengthened by overcoming the difficulties. Other Olympic cities have since benefited from the transfer of knowledge about transport planning at the Sydney Olympics (Bovy, 2007). Sadly for NSW, the multimodal success of Sydney's Olympics has been better transferred outside Australia to other Olympic venues than within Sydney.

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