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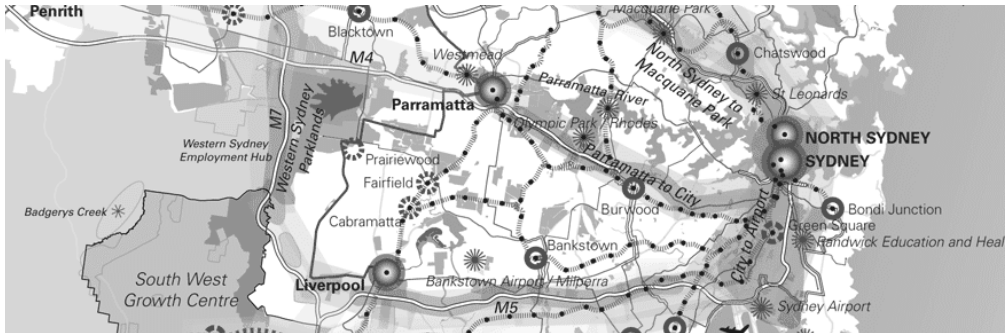
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CITYFUTURES

Metropolitan Strategies in Australia

Raymond Bunker

July 2008

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City Futures Research Centre

Research Paper No. 9

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Cover photograph: Main Elements of the Sydney Metropolitan Strategy, 2005
(adapted from NSW Department of Planning 2005, pp. 10-11)

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CONTENTS

INTRODUCTION	1
1 PROGRESS AND PROSPECT WITH ‘CITY OF CITIES: A PLAN FOR SYDNEY’S FUTURE’	2
Abstract:	2
Introduction.....	2
1. Proposals in City of Cities	4
2. Taking stock	10
3. Evaluating the plan.....	15
4. Possible changes to the planning process.....	19
Conclusion.....	19
References	21
2 SEEKING CERTAINTY: RECENT PLANNING FOR SYDNEY AND MELBOURNE.....	24
Abstract:	24
Introduction.....	24
1. Recent theories and examples of strategic planning	25
2. The reasons for and the drivers of the strategies for Sydney and Melbourne	28
3. The provisions of Melbourne 2030 and City of Cities.	30
4. The planning process and a changing urban environment.....	37
5. Adapting the strategic planning processes for Sydney and Melbourne.....	39
Conclusion.....	41
References	42
3 A PLENITUDE, PLETHORA OR PLAGUE OF PLANS: STATE STRATEGIC PLANS, METROPOLITAN STRATEGIES AND INFRASTRUCTURE PLANS?	45
Abstract:	45
Introduction.....	45
1. The South Australian Plans.....	47
2. The New South Wales plans.....	51
3. Comment on each type of plan	55

4. How the plans might evolve	57
Conclusions	59
4 A COSMOPOLITAN DEMOCRACY: THE REPOSITIONING OF RECENT AUSTRALIAN METROPOLITAN STRATEGIES?	62
Abstract:	62
Spatial strategies for metropolitan areas – an Australian paradigm?	62
Current Australian metropolitan strategies	66
New emerging trends	71
Lessons from Europe?	72
Repositioning metropolitan strategies in Australia	76
Conclusion	78
References	80

INTRODUCTION

This issues Paper brings together four papers written to review metropolitan strategies in Australia released over the last six years for the state capital cities of Sydney, Melbourne, South East Queensland (Greater Brisbane), Adelaide and Perth. The four papers do not form a unified whole with a common template, rather they mark an evolution in discussion from Sydney to all the other strategies. More importantly they show an extension in the ambit of the discussion. The first three papers review strategies *in their own terms*. The last paper presents a more radical view about how metropolitan strategies might evolve to shape the spatial outcomes of - and influences on – the policies needed to address the crucial issues and challenges facing Australia's cities and regions.

The papers in chronological order of their publication, are:

Progress and Prospect with 'City of Cities: a Plan for Sydney's Future' City Futures Research Centre, Issues Paper No.4, April 2007. This is a reconstructed and updated revision of an article published under the title 'How far and in what ways is Sydney's new metropolitan strategy likely to be implemented?' in *Australian Planner* for March 2007, Vol. 44 No. 1, pp. 26-33.

Seeking Certainty: recent planning for Sydney and Melbourne (with Glen Searle), *Town Planning Review*, Vol. 78 No.5, pp. 619-642.

A Plenitude, Plethora or Plague of Plans: state strategic plans, metropolitan strategies and infrastructure plans? A paper presented to the 3rd State of Australian Cities Conference, Adelaide, 28-30 November 2007. This paper has been selected, with other SOAC papers to be reproduced in a special issue of *Built Environment*.

A Cosmopolitan Democracy: the repositioning of recent metropolitan strategies in Australia. Previously unpublished.

1 PROGRESS AND PROSPECT WITH 'CITY OF CITIES: A PLAN FOR SYDNEY'S FUTURE'

Abstract: *A continuing issue in metropolitan strategic plans is how much of them will be implemented. This appears to depend on how far planners are able to understand and shape the future of the city; whether appropriate planning and decision-making frameworks and mechanisms exist or can be put in place for making proposals happen; and what kind of methodology, content and process is used in preparing a plan. These themes are employed to analyse the way four of the major issues attending the future of Sydney are dealt with in the recently released metropolitan strategy 'City of Cities', and in subsequent statements and plans. These are economic development and its spatial representation, housing, water management and use, and transportation. The first two of these represent innovative exercises in the linking of economic activity and living with land use, density and location. The second two reflect more abstract challenges in framing proposals to acknowledge the increasing constraints of natural resources upon which the city depends. The review ends by suggesting that changes to the planning process would improve the chances of implementation, and the effectiveness of the outcomes.*

Introduction

Recent far-reaching reviews of metropolitan planning by Gleeson and his colleagues (Gleeson and Darbas 2004, Gleeson et al. 2004a, 2004b, 2004c) have led to the conclusion that the key issue is how effectively sustainability and governance are addressed in them (Gleeson et al. 2004c). The recent spate of metropolitan plans all claim to use both these qualities as leading instruments in fashioning and carrying out their strategies. However they do this in different ways.

Those on the eastern seaboard have similarities. The first, Melbourne 2030, (Department of Infrastructure Victoria 2002) sets out a program of restructuring the city towards a more compact poly-centred form. While there is some growth in greenfields locations, an urban growth boundary seeks to limit and concentrate this. Within the existing urban area, a growing proportion of future housing is organized around activity centres in medium- and high-density configurations, where there is also an increasing concentration of jobs and services. These centres are connected with central Melbourne, with each other, and with some regional cities in the arc surrounding Melbourne by improved public transport. Sydney is driven more strongly by the need to strengthen its role as a global city, and plans a spatial economy structured by highly articulated systems of regional cities and major centres within the metropolitan area joined by rail lines and bus corridors. Most future housing is planned within the existing urban area in medium- and high-density form around centres, or in corridors within reach of public transport. Brisbane continues these

restructuring themes (Office of Urban Management Queensland 2005), but reflects a long-continuing process of plan-making with local councils in south east Queensland, and there is less specification and precise definition about the urban outcomes.

Adelaide's circumstances are somewhat different, reflected in the 2006 Planning Strategy for Metropolitan Adelaide (Government of South Australia 2006). Economic development is the main thrust of the accompanying South Australia's Strategic Plan (Office of the Premier 2004), for which the metropolitan strategy acts as one spatial component. While the same themes are present as those in the eastern seaboard metropolitan plans, there is little specification of targets for housing and job growth in various locations, and far more concern with water management and protection and enhancement of ecosystems. The rural-urban fringe is a critical area for water harvesting purposes and for intensive agriculture, horticulture and tourism. There is a separate plan for this region, which contains an urban boundary. Perth has heavy emphasis on planning a network city, using the polycentric, more compact city theme in an interesting variation where land use and transportation are intimately related and used as the major instrument of growth and change (Western Australian Planning Commission 2005). There is also a strong emphasis on process with a program of public involvement and progressive development of strategic initiatives and commitments.

How far and in what ways these plans are likely to be implemented could be seen as a test of how well sustainability and governance have been defined and used in them. To make that test operational it is necessary to define a process of analysis and evaluation that reflects the way each of these plans has been put together. The likelihood of implementation seems to involve three considerations. Firstly, whether planners have adequately understood the forces shaping and driving cities and devised appropriate proposals to more effectively direct these. Secondly whether policies, decisions, investment, projects and operations, particularly by governments will support and drive the plan. Thirdly, it is within this context that planners devise a methodology and process for plan-making and communication. Hence the importance of this third element, in 'reading' the plan (Searle 2004) and in examining the suitability and effectiveness of its content, argument and structure. Applying this framework of analysis to each of the plans should result in conclusions about how far and in what ways they may be realized.

This paper deals with four of the major topics contained in the current metropolitan strategy for Sydney City of Cities (Department of Planning NSW 2005a). These are economy and employment and their link with centres and corridors; housing; management and use of water; and transportation. The first section contains a description of the proposals concerning these important topics. The second major section applies the three criteria defined above to examine how far the proposals are likely to be implemented. A third section gathers together these assessments in evaluating the plan. A final section uses these conclusions to suggest changes to the process of metropolitan strategic plan-making in order to improve the chances of implementation

City of Cities (hereafter called the plan) is centrally about economic development. The home page for the metropolitan strategy calls it the 'NSW Government's long term plan to maintain Sydney's role in the global economy and to plan for growth and change' (www.metrostrategy.nsw.gov.au). The most noticeable and strongest feature of the plan is in classifying economic activity and developing a differentiated typology of centres and locations to which different kinds of businesses are linked. These form the first two sections of the plan and are closely associated.

1. Proposals in City of Cities

Regarding the economy, employment, centres and corridors

Earlier studies have identified the importance that advanced business services have in global economic activity, and their marked clustering tendencies (Spiller 2003, 2005). This concept is carried forward and extended in the plan to identify the higher-order producer and consumer services of this kind and where they are located. Thus 'Global Sydney' (central Sydney and North Sydney) is a location for concentrations of information technology and communication, multimedia, tourism and hospitality, cultural industries, finance and business, and health and education (p.48). This concentration is extended south to the airport and north west to Macquarie Business Park to form a 'Global Economic Corridor' containing other clusters of these and other higher-order industries. The plan estimates 700,000 jobs were contained in this corridor in 2001 and there will be 850,000 in 2031.

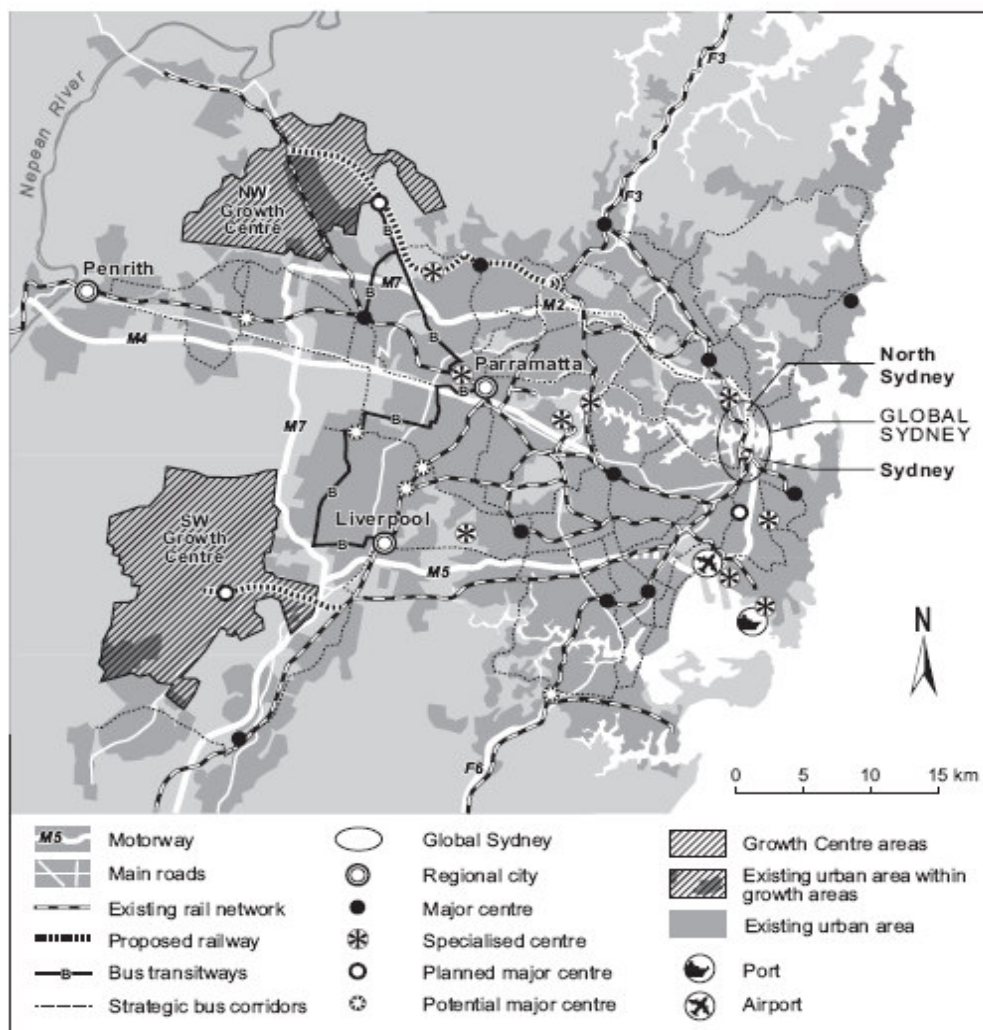
The other complex of employment identified is that of 'Western Sydney', the suburban area stretching to the west of Olympic Park, just to the east of Parramatta. This is estimated to contain 663,000 jobs in 2001 and projected to have 900,000 in 2031. This suburban economy is driven by the consumption demands of its growing population, and the continuing decentralisation and establishment of manufacturing, commercial, warehousing, storage, and distribution operations.

The spatial representation of the Sydney economy and its various components is a particularly useful one and reflects research and argument of this kind into concentrations of employment, clustering, and the development of suburban economies around the changing dynamics of housing and labor markets. (Freestone 1996, O'Connor 1997, O'Connor et al. 2001, Fagan et al. 2004, Dodson and Berry 2004, Forster 2004). This theme becomes a main component in the metropolitan strategy map, a simplified version of which is shown in Figure 1.

Twenty seven 'strategic' centres of various kinds are nominated and employment 'targets' for each set for 2031. They are meant to act as locations to house and support business and knowledge-based activities (p. 97). The most important are the two centres of Sydney and North Sydney making up 'Global Sydney'. Four regional centres are designated, three in the west at Parramatta, Liverpool and Penrith and the fourth north of Sydney at Gosford in the Central Coast of New South Wales. There are then nine specialized

centres of different kinds such as Sydney Airport and Randwick Education and Health. Finally there are another twelve major centres exercising more generalized functions. The plan seeks to strengthen their role of these strategic centres so that their share of total jobs is expected to increase from just over 40 per cent to almost 45 per cent (p. 94).

Figure 1. Main Elements of the Sydney Metropolitan Strategy, 2005
(adapted from NSW Department of Planning 2005, pp. 10-11)



Apart from the 'Global Economic Corridor' already defined as extending south and north west of 'Global Sydney', other corridors of growth and renewal are defined. They are variously categorized as 'Economic' 'Renewal' and 'Enterprise'. One Economic Corridor along the M5 joins Sydney Airport with Liverpool to the west. Another extends north-south along the M7, the recently completed western section of the 'Orbital Motorway Network'. The important Parramatta-Sydney road and rail corridor is the sole Renewal Corridor, although other routes are identified as Potential Renewal Corridors.

The purpose of analysing the major characteristics of Sydney's economy, including its spatial representation, is that this can then be used as a basis for developing a pattern of economic activity largely housed in centres and

corridors of differing character and importance. This is also supported by the main transportation links underpinning the plan.

Western Sydney bears the brunt of growth in employment and residential population. Outside Sydney City and the Inner North subregion (largely Global Sydney), the West Central, North West and South West subregions are anticipated to house about three quarters of the expected growth of jobs, if Gosford-Wyong is excluded. It is only possible to estimate the increase in dwellings on the same basis using the data provided in the plan, but a comparable proportion of new housing is located in these subregions. To accompany this population growth so that local employment opportunities are available will mean a major effort in job creation in the region where unemployment is already relatively high. Few of these jobs are likely to be advanced business services of the kind characterizing Global Sydney and it is to be expected that there will be an increase in the existing large-scale travel to jobs (p. 105) outside the area for this kind of employment.

Housing

The plan points out that important demographic and social trends means that there will be an increasing number of smaller households and those made up of elderly people. It estimates that 640,000 new homes will be required by 2031. About 195,000 of these will be built in greenfields areas, mainly in growth sectors extending the suburban growth of Sydney in the north west and south west. It envisages that 60-70 per cent of new housing will be constructed in existing urban areas, mainly around centres and in corridors amounting to about 445,000 dwellings by 2031. This gives a balanced approach between new releases of greenfields land, and renewal and infill in existing suburbs. The latter will thus be predominantly in the form of attached housing of one kind or another – terrace houses, villas, townhouses, flats, units, apartments.

Housing densities in existing urban areas are relatively high in central Sydney, from there north to Chatswood, east to the coast, and to the immediate south and west of the City. The plan acknowledges that there may be difficulties in raising densities in such areas and argues that there is much potential for renewal in the middle and outer suburbs to the west. Here the low density separate housing which exists is “the first development since the land was cleared and transformed from agriculture and pasture” (p. 136). The housing targets for dwelling increases here amount to 205,000 of the 445,000 needed in existing urban areas. When account is taken of the dwellings removed in the renewal process, considerably more than this net increase will need to be built.

An analysis of the social profile of people presently living in high density housing in the three nominated regional centres of Parramatta, Liverpool and Penrith has been carried out (Bunker et al. 2005c). The data used to construct a social profile for each area were taken from the 2001 Census of Population and Housing as well as the Australian Bureau of Statistics Index of Socio-Economic Disadvantage (ABS 2003). The lower the Index the more disadvantaged is the population. The average for the Sydney Statistical Division was 1,017.

The case study area of Parramatta comprised six Census Districts (CDs) in and around this historic settlement and major centre which has been supported for many years as the second most important location in Sydney outside Global Sydney. The picture is of a relatively disadvantaged migrant population mainly from Asia with low incomes, employment skills and limited connections with Australia society. There are few children and a high rate of turnover of population. The Index of Socio-Economic Disadvantage for the suburb had a value of 936.

The Liverpool case study area consisted of eight CDs to the west of the railway station. This was another migrant community but in this case most came from continental Europe, with some from Asia and Oceania. Moreover, a fifth of the population consisted of children, with many single parent families. This is a welfare dependent community, with a low score of 842 for the suburb on the Index of Socio- Economic Disadvantage.

The Penrith case study area consisted of three CDs again near the railway station. In contrast to Liverpool and Parramatta, this was a predominantly Anglo-Celtic population with over half the households consisting of only one person, nearly two and a half times the average for the Sydney Statistical Division. There were few children, and this was another low income population, with low employment skills and high unemployment. The low score of 897 for the suburb on the Index of Socio-Economic Disadvantage reflects the many single person households of unskilled young and middle-aged adults.

These snapshots show the importance of differentiating among the households and people living in higher-density housing, so that proposals for substantial increases in these kinds of dwellings are better informed by present circumstances and future prospects. Otherwise the social outcomes will be regressive and social sustainability impaired.

Water management and use

Before the release of City of Cities, that component dealing with the sustainable use of water had already been covered in the Metropolitan Water Plan (Department of Infrastructure, Planning and Natural Resources 2004) and is included in City of Cities. The Water Plan provided a framework for “a sustainable and secure water system for people and rivers over the next 25 years” as the then Premier claimed in the introduction (p. 1). It contained a number of measures both to manage and reduce demand and to improve supply. The supply measures included accessing deepwater at the bottom of the dams, raising the height of the Tallowa Dam on the Shoalhaven River to the south of Sydney so that additional supplies could be pumped from there to Sydney, implementing new recycling initiatives in urban development in western Sydney, and examining the possibility of building of a desalination plant. It also commissioned research from CSIRO into the processes of climate change as compared with natural variability in weather regimes

On the demand side there has been the successful application of management policies and programs which has saved 20 per cent in water consumption in the period 1991 -2004, much of this in the business and industrial sectors (Turner et al. 2005). BASIX, the Building Sustainability Index has required all new

separate houses to achieve savings of 40 per cent in mains water supply compared with the average consumption of similar dwellings since July 2004. There was some extension of this requirement in 2006 to cover alterations and additions.

The Water Plan was replaced by a new one in February 2006 (Government of NSW 2006), in ways to incorporate more recycling projects, including dual use reticulation systems in new residential estates, mainly in western Sydney. It identified the site for a controversial desalination plant at Kurnell, which has now been approved and will be built if needed. It continued its research into the potential effects of climate change on water availability and potential water demand by commissioning a new study involving the CSIRO, University of New South Wales and other parties.

There is growing evidence of climate change and the reduction in rainfall in eastern New South Wales (Flannery 2005). If this is so, there is every indication that long-term planning will need to move much more to managing demand, and recycling used water, as well as seeking new sources of supply such as harvesting stormwater or a desalination plant.. Given this uncertainty, and the possibility of the diminishing effect of demand management measures over time (Karm 2006), there is every reason to support the more flexible 'adaptive management' espoused in the new Water Plan (at four times the length of its short-lived predecessor) to address changing circumstances and increased understanding of the effects of climate change.

Transport

There is considerable attention to the movement of freight in the plan, with 86 per cent of this being carried presently by road (p. 162) and that proportion having steadily risen over the years. It is intended to reverse this trend, and the plan makes much of upgrading and extending the metropolitan rail freight network (p. 190).

Regarding public transport, City of Cities develops strategies to connect the nominated centres together more effectively by heavy rail and strategic bus corridors. New urban development in the north west and south west is to be served by extending existing rail lines, scheduled for 2017 (recently brought forward to 2015) and 2012 respectively though a final decision on the timing of these projects will depend on 'continuing detailed planning, financial and economic studies' (p. 165). A new rail link under the harbour is scheduled for 2017 to accommodate these additional services. Rail services will also be improved by greater reliability and timetabling to more effectively reflect changing travel demands. A number of strategic bus corridors giving fast access to centres were identified in the Review of Bus Services in NSW (Unsworth 2004). The metropolitan plan adopts a network of some 43 strategic corridors providing bus priority which will be progressively implemented from 2006 to 2012. The strategic network is to be integrated with local systems through bus contract reform.

Transport is to be improved within 'Global Sydney' by improvements to bus services in conjunction with the opening of the Cross City Tunnel, including

Table 1: Summary of the main proposals on selected themes contained in the Sydney metropolitan strategy, 2005

Economic Development Centres and Corridors	Housing	Water	Transport
Provide a varied framework for accommodating jobs across the city. This should encourage growth of advanced enterprises and higher order activities with benefits from co-location and clustering in a global corridor stretching from Macquarie University in the north-west through the CBD to the Airport. Other major strategic centres are designated in the suburbs for such activities and those serving the local population. Employment lands are identified for businesses using broad acres, and 'economic, enterprise and renewal corridors' to house varied activities along major communication routes. Job targets are set for centres for the year 2031.	Provide a varied housing stock for the needs of a changing population with smaller and more diverse household types. 30-40% of new housing to be in greenfields sectors in the north west and south west mainly. Remainder to be in existing urban areas, much of it in the form of renewal and redevelopment in medium- and high-density form, particularly in middle suburbs to the west. Focus residential development around strategic centres and other centres of varying size and along routes well served by public transport. Sub regional targets set for 2031 populations, and about 82% of the 445,000 new dwellings needed seen as located in the global central city, other major centres or those of lesser size.	Incorporates 2004 Metropolitan Water Plan "towards a sustainable and secure water system for people and rivers over the next 25 years". BASIX system requires all new dwellings to be designed to reduce water consumption by 40% compared with current average use. Recycling schemes to be expanded including treated sewage effluent for industry and use of recycled water in the new greenfields growth centres. Plan superseded in 2006 by new Water Plan with increased attention to recycling, augmenting various sources of supply including a desalination plant to be built if dam levels fall to a critical level	New rail route from the north west sector through the city centre and out to the south west sector to be completed by 2017 and 2012 respectively, subject to budget and development circumstances nearer those dates. Completion of Epping-Chatswood rail link. Upgrading and untangling of rail network. A bus transit way from Liverpool to Parramatta will be extended to Rouse Hill and over forty strategic bus corridors completed linking the major centres so that cross-suburban travel by public transport is facilitated. Expansion of shipping operations at Port Botany and construction of dedicated freight lines to move goods and lessen reliance on road trucking, dependent on federal funding.

extension of bus lane operating hours. Public transport is to be more effectively integrated with improved interchanges and integrated ticketing. A metropolitan parking policy is to be developed and implemented to encourage the use of public transport from and to centres.

Travel and transport is possibly the most important issue facing Sydney. A recent study by the Centre for International Economics (2005) for the Sydney Morning Herald estimated that vehicle travel is costing more than \$18 billion a year through congestion, accidents, greenhouse gas emissions and pollution, and threatens to stunt the State's economy. Distances traveled in Sydney are expected to rise by 29 per cent between 2005 and 2020 and social costs by 32 per cent.

The transportation proposals in City of Cities represent an amalgam of various plans and projects, based on trying to more adequately cope with current conditions. Some may not happen and the then Opposition leader, Peter Debnam has pointed out that most of the projects proposed in the last big transport plan Action for Transport 2010 in 1998 had not been delivered (Sydney Morning Herald, 20 November 2006). The urgent proposals for the movement of freight by rail are dependent on federal funding. On past experience others will be delayed, or even cancelled. The major rail links to serve the new north west and south west sectors are programmed into a future where travel patterns by car in those developing areas will be well established. The suburban economy of western Sydney depends on private motor vehicles.

2. Taking stock

Table 1 summarises the proposals contained in City of Cities in the four matters discussed. The necessary descriptions of them above can now be gathered together into a more evaluative framework of discussion. We now apply the three criteria of understanding and appreciation of urban conditions and trends, shaping appropriate policy responses, and developing suitable planning processes.

Economic development, centres and corridors

Understanding

City of Cities contains good analysis of the drivers of the economic development of Sydney and their spatial representation. However, this needs to be pursued further in empirically uncovering the local processes involved in growing innovative businesses (Berry 2005). Such studies would, for example examine the validity of distinctions made between two types of clustering forces: that arising from linkage of one business to another in a functional manner, and that arising from cross-industry advantages generated by a rich milieu of urban services such as computing professionals and high order business services (Searle and Pritchard 2005).

The examination of labor markets begun in the comparison of Western Sydney with Global Sydney needs to be partnered with similar consideration of housing markets.

Otherwise continuing polarizing trends regarding advantage and disadvantage (O'Connor et al. 2001), could also compromise economic performance. The choice of regional cities in the west of Sydney happens to select existing populations living in attached housing with troubling scores in terms of socio-economic disadvantage. If these conditions are reinforced by the projected increase in population, there will need to be a variety of initiatives and programs to prevent further social stress.

Robustness of government policies

The proposed strategy for the economy and employment depends heavily on a suite of associated measures including the provision of key infrastructure. The later State Infrastructure Strategy (Department of Treasury NSW 2006) is closely tied in with the metropolitan strategy and does contain much of the short- and medium-term public investment needed to implement the proposals in City of Cities. The important Innovation Strategy is under development and has been partnered with the metropolitan strategy in the selection of the strategic cities designated in City of Cities for establishing fast wireless broadband infrastructure as an aid to economic development (lemma 2006b). While this may represent the 'magnet infrastructure' designed to transform centres so that they achieve their economic and social potential (p. 70) there are no signs of similar supportive investment to that provided in some of the business clusters and specialized centres in Melbourne and Brisbane. The Innovation Strategy was showcased in an Innovation Statement in 2006 (lemma 2006b) which contained principles and objectives and now appears to be the responsibility of the Department of State and Regional Development.

Planning processes

The City of Cities proposals seems to act as a default program of economic development for Sydney, and are accordingly heavily weighted in terms of urban development, when other circumstances could also be of critical importance. It remains to be seen how far the developing Innovation Strategy will encompass these necessary measures where skills training, education and other labor market programs directed to specific locations could well be important (Dodson and Berry 2004). The re-election of the lemma Government in March 2007 has, however provided a continuing platform for this initiative.

The selection of centres of various kinds and their job targets need further substantiation and monitoring. It might well be better to concentrate on a few well-researched centres and focus all efforts on ensuring their success in economic, social, environmental and communications terms, while carefully watching progress and taking appropriate supportive action.

Housing

Understanding

Analysis in City of Cities is limited to demographic and social trends such as an ageing population and smaller households without any consideration of communal conditions such as severe disadvantage and dysfunction (Bunker et al., 2005a, 2005b, 2005c; Randolph and Holloway 2005, Baum et al., 2005, 2006). The lack of research into housing markets could continue to concentrate

pockets of unemployment and deprivation, particularly in western Sydney (Fagan and Dowling 2005, Berry, 2006), to the extent of compromising economic development and ensuring either long journeys to work or travel by car or both.

Robustness of government policies

Greenfields development in the north west and south west is carefully organised with a Growth Centres Commission, preparation of plans mapping out transit-oriented development in each sector involving a centres hierarchy, permeable street patterns and residential densities graduated according to access to public transport and centres. A special infrastructure contribution is required in these areas and it is yet to be seen how far the development will achieve some of its objectives (McMahon 2006).

The proposed renewal and redevelopment in existing middle and some outer suburban areas in the form of medium- and high-density housing, particularly in western Sydney needs much more refinement and detail to establish its appropriate character (Randolph 2002), and probably requires interventionist measures and some funding by government to happen smoothly. Housing affordability will not be helped by the special infrastructure contribution in growth areas. The extent of necessary renewal and augmentation of infrastructure in areas of significant increase in dwelling stock, and how it is to be funded is not worked out.

Renewal and redevelopment proposals depend heavily on the operation of the market within enabling reforms such as the standard local environment plan template. It is necessary for suitable reformed legislation to cover the increasing diversity and complexity of strata plan developments as acknowledged in City of Cities.

Planning processes

Implementation of the dwelling stock increases proposed in City of Cities is by the further allocation of the year 2031 dwelling numbers by subregions contained in the strategy to local councils in the subregion through a sub regional planning process (Department of Planning, 2005b, 2006a, 2006b). A METRIX sub regional planning model has been developed to allocate the additional dwellings needed in the best configuration possible and is also of use in estimating vehicle kilometer trips generated in different scenarios (Corpuz et al. 2006). These allocations of dwelling capacity by local council areas take no account of the viability, effectiveness or consistency of the renewal and development process. Apart from the neglect of social impacts and environmental consequences, the strategy displays little consideration of how the urban renewal process works and whether the anticipated increase in dwellings and population will actually take place. It skates lightly over the necessary augmentation and replacement of infrastructure which will be necessary and conditioned much by local circumstances. There is no discussion of the kinds of intervention that may be necessary to bring about renewal in a satisfactory manner (Randolph 2002).

Water management and use

Understanding

The uncertainties apparent about the reliability and amount of future rainfall have led to the expansion of an important research program involving CSIRO and the University of NSW in the new 2006 Metropolitan Water Plan. In March 2007 a major new climate change research centre was established at the University of New South Wales as a focus for a diverse network of researchers including academics and government research groups such as CSIRO and the Bureau of Meteorology. Investigation is continuing into the potential of other sources of supply, of demand management, and of recycling.

Robustness of government policies

Since the publication of City of Cities, the new Metropolitan Water Plan has begun to shape an expanded suite of policy measures to address water management and use. These are beginning to emphasise demand management and recycling more than previous policies. Shorter-term measures include the construction of a dam in the Hunter Valley, possible pumping of water from ground water aquifers in the Southern Highlands and the building of a desalination plant if water levels fall below critical levels. As the potential changes in supply and demand management are being explored, a flexible program of 'adaptive management' is being followed as information-gathering continues and various policy options are considered. Successive decisions and commitments will follow as these uncertainties are clarified.

Planning processes

These circumstances suggest that water management and use will need to evolve much further beyond the sensible demand management measures already introduced. Actions already taken or in train will provide savings, but further decisions will be needed well before 25 years, given the growth in population and the uncertainties brought about by climate change.

Some indication of the range and mix of policy measures that need to be devised are contained in recent research on the causes and characteristics of residential water consumption in Sydney (Troy et al. 2005). These comprise:

- Educational Campaign
- The supply obligation of the water supply authority should be limited to the volume of potable water needed for the health of the population (this is estimated to be about 20 per cent of total consumption)
- Consumers should be required to accept some responsibility for their own consumption behaviour by making use of the water resources available locally
- (through rainwater tanks and storage and recycling of grey water)
- Waste water flows should be reduced to minimise pollution of receiving waters
- Any program of development should be capable of being progressively introduced

- Equitable pricing regime
- No human consumption of recycled water.

Some parts of this particular suite of measures involving recycling and re-use of water within the dwelling, would need to be designed into the construction of all new accommodation including medium- and high-density housing.

Transport

Understanding

The Transportation and Population Data Centre in the Department of Planning collects and analyses data on trip and travel characteristics, particularly the journey to work. The Centre has developed a model called METRIX to monitor and assess council plans to ensure that planned development aligns with the Strategy's sustainability and growth targets and in particular to moderate the vehicle kilometer trips generated. The metropolitan strategy still relies heavily on concentrating jobs and services in centres and arranging population growth so that people can and will access nearby centres by public transport.

More research is still needed into the changes to tripmaking that these changes to urban form and structure might make. Changing work practices, the organisation of business activity, and the dynamic and atomized character of household trip-making may alter the assumptions on which the reduction in car-dependence takes place. The determinants and consequences of decisions about travel made by households, businesses and other establishments need continual monitoring.

Robustness of government policies

City of Cities assembles the programs and projects of various state agencies involved in public transport, and as noted above, the 2006 State Infrastructure Strategy contains some of the infrastructure projects mentioned in the plan. But the later crash program of \$660 million to ease traffic congestion announced by the Premier on 20 November 2006 (Iemma 2006c) introduced some new costly initiatives to address bottlenecks (or 'pinch points') on roads and increasing congestion in the CBD, while accelerating some of the public transport proposals in City of Cities. The freight movement proposals involve Commonwealth Government funding.

Despite the importance of clustering and interaction of business activities in the Global Arc, there is no systematic attempt to plan for easy and frequent movement by public transport around this area such as exists in other global cities.

Planning processes

Transport planning is continually criticized for the perceived lack of systematic planning for both public and private travel. It seems more concerned with shuffling projects for public transport and roads rather than designing systems for lessening car dependence. There has been no consideration of such well-researched proposals for transport from independent researchers at the Warren

Centre (2002), and in some exasperation, an alternative integrated transport strategy was formulated by Chris Stapleton, a transportation planning consultant. It was launched in March 2007 by an organization called 10,000 Friends of Greater Sydney (or FROGS), an offshoot of the Warren Centre study. Considerable public disquiet about transport is shown in continuing and reputable opinion surveys.

3. Evaluating the plan

Gathering these threads together leads to a number of conclusions. Firstly, there are significant gaps in the research basis for the plan. For example, the plan seems to assume a trickle-down effect of increased prosperity upon the fortunes of the less advantaged. Its aim of 'fairness' is reduced to improving travel access to jobs and services which, while important ignores personal and institutional barriers to urban goods and services. The lack of analysis of housing markets and social impacts is puzzling given the attention to the 'new economy' and its evolving labor markets. The continued decline in housing affordability has the potential to erode economic competitiveness (Property Council of Australia 2006). In more general terms, the bibliography is dominated by important but in-principle contributions by international scholars which need enrichment and adaptation to the Sydney scene (Berry 2005), government reports and specialized consultancy studies. There is almost no reference to the rich corpus of research on Australian urban development. Gleeson et al. in their recent review of metropolitan planning (2004c) draw attention to Brian McLoughlin's (1992) complaint about the "lack of theoretically informed analysis of urban planning" and Melbourne 2030 has been criticized by academics for its simplistic view of urban life (Birrell et al. 2005). The result is an over-reliance on changes to the built environment to achieve social, economic and environmental ends, and lack of appreciation of the complex influences on behaviour and decision-making by Sydney residents.

Secondly, the plan acts as a basis of resolution for a number of state government policies and builds upon them to fashion a restructuring of Sydney to facilitate economic development and provide certainty for developers, investors and businesses. In doing this it makes a number of assumptions about the substance and longevity of those policies. Laying aside those which occur when there are changes in government, there are often abrupt changes in government policy. The current plan bears the marks of the relatively recent and sudden decision to virtually abandon sea-born freight movement in Sydney Harbor and transfer operations elsewhere including an expanded Port Botany with all the attendant problems of increased freight and general traffic to the south and west. The State government has no control over proposals for substantial commercial development at Sydney Airport and industrial and business expansion at Bankstown Airport, because they are on Commonwealth owned land.

It is highly probable that there will be considerable changes in emphasis, if not in direction about transport policy, brought about by growing congestion on the roads and the environmental impact of increased vehicular travel. Reducing car-dependence will require a variety of measures including regulation and pricing as well as land use planning and infrastructure provision. There are

similar uncertainties with water management and use necessitating 'adaptive management' as the effects of climate change begins to become apparent.

Thirdly, in a time of growing uncertainty with the need to combine well-targeted commitment with flexibility, creative opportunism and rapid adjustments in government policy, it is puzzling to find the plan assuming a modernist character as a long-term plan with strongly articulated targets of employment and housing on which the implementation of the plan seems to depend. This planning process seems more appropriate for planning localities, estates, and transport systems and in delivering projects rather than shaping the progressive decisions needed to deal with the potential of a dynamic evolving metropolis facing major uncertainties which must be resolved as it charts a transition towards sustainability. It is true that the plan promises annual updates and five-yearly reviews. But that usually leads to increased efforts to achieve it together with minor modifications. Inevitably the plan begins to lose credibility as major changes in trends or circumstances take place.

It is important to illustrate this point further, by reference to the job targets in the strategic centres, and their sources and history. These are specified in the plan together with statements about the importance of their adoption and achievement (pp. 94-5). The Sydney Region Outline Plan of 1968 (State Planning Authority of NSW 1968) nominated only two major centres outside the centre of Sydney. These were Parramatta and Campbelltown. Below these, five town centres at Camden, Blacktown, Mount Druitt and Chatswood were mentioned without specification as to their planned role, growth or future size.

Tables 2 and 3 adopt the nomination and nomenclature of centres in City of Cities. Table 2 compares the forecasts made in the Sydney plan of 1988 (Department of Environment and Planning 1988) about future employment in major centres with actual figures for 2001 and forecasts for 2031 contained in City of Cities. It is likely there may have been some changes in the definitions of some centres between the two documents as growth has occurred and City of Cities contains figures for central Sydney expanded beyond the CBD. The definition of specialised centres in City of Cities also brings in more dispersed and varied concentrations of jobs than those contained in a commercial centre, and only some of these are contained in the 1988 plan.

Campbelltown has slipped down the league table since 1968 and has been replaced in City of Cities by the two river cities of Liverpool and Penrith. This in itself should cause some concern given the large population in the south west of Sydney.

These tables suggest that precise specification of job targets for all centres well into the future is a problematic exercise. This does mean that some major centres selected after careful research, vigilantly monitored and well-supported should be used as levers for growth and change.

Table 2: Employment distribution in centres at base years (1981 and 2001) and as forecast in 1988 and 2005 Sydney plans. NB definition of some centres changed in base years, particularly in central Sydney.

Centres (in City of Cities parlance and order)	Sydney into its Third Century, 1988 (p 48)		City of Cities, 2005 (p 95)	
	1981	2011	2001	2031
<i>Global Sydney</i>				
Sydney CBD	188,919	220,000	331,572	380,000
North Sydney	28,750	40,000	49,160	60,000
<i>Regional Centres</i>				
Parramatta	20,360	60,000	41,662	60,000
Liverpool	10,904	20,000	15,533	30,000
Penrith	3,703	20,000	19,074	30,000
Gosford	5,233	10,000	12,284	17,000
<i>Specialised Centres</i>				
Macquarie Park			32,308	55,000
St Leonards	22,983	20,000	25,166	33,000
Park/Rhodes			13,667	25,000
Port Botany & environs			11,264	12,000
Sydney airport & environs			36,063	55,000
Randwick education & health			9,790	12,000
Westmead			13,267	20,000
Bankstown airport/Milperra			16,325	20,000
Norwest		8,000	4,651	15,000
<i>Major Centres</i>				
Bankstown	9,727	15,000	10,094	14,000
Blacktown	10,592	18,000	10,220	15,000
Bondi Junction	6,095	10,000	9,821	14,000
Brookvale/Deewhy	5,100	10,000	9,663	12,000
Burwood	7,355	10,000	9,525	13,000
Campbelltown	4,729	30,000	10,542	15,000
Castle Hill			9,091	12,000
Chatswood	9,363	20,000	22,923	28,000
Hornsby	9,637	15,000	9,412	12,000
Hurstville	6,978	10,000	12,983	17,000
Kogarah			9,476	12,000
Wyong/Tuggerah	1,000 (est)	5,000	8,417	12,000
TOTAL	351,428	553,000	763,953	1,000,000

Table 3: Employment distribution in centres for various years as proposed by the Property Council of Australia in 2002 and City of Cities in 2005. NB definition of some centres may differ somewhat between the two documents: *Sydney CBD expanded.

Centres (in City of Cities parlance and order)	Initiatives for Sydney Property Council of Australia, (pp.14-15)		City of Cities, 2005 (p 95)	
	1996	2011	2026	2031
<i>Global Sydney</i>				
Sydney CBD	210,000	220,000	230,000	380,000*
North Sydney	35,000	40,000	50,000	60,000
<i>Regional Centres</i>				
Parramatta	35,000	50,000	60,000	60,000
Liverpool	11,000	30,000	40,000	30,000
Penrith	12,000	20,000	25,000	30,000
Gosford	5,000	6,000	7,000	17,000
<i>Specialised Centres</i>				
Macquarie Park	29,887	40,000	52,000	55,000
St Leonards	30,000	40,000	50,000	33,000
Park/Rhodes				25,000
Port Botany & environs				12,000
Sydney airport & environs	11,321	20,000	30,000	55,000
Randwick education & health				12,000
Westmead	16,102	18,000	20,000	20,000
Bankstown airport/Milperra	21,741	22,000	22,000	20,000
Norwest				15,000
<i>Major Centres</i>				
Bankstown	11,000	14,000	15,000	14,000
Blacktown	8,500	15,000	20,000	15,000
Bondi Junction	9,000	12,000	15,000	14,000
Brookvale/Deewhy	15,000	18,000	20,000	12,000
Burwood	8,500	10,000	12,000	13,000
Campbelltown	8,500	10,000	15,000	15,000
Castle Hill	3,000	5,000	8,000	12,000
Chatswood	20,000	25,000	30,000	28,000
Hornsby	7,000	8,000	10,000	12,000
Hurstville	9,000	12,000	15,000	17,000
Kogarah	7,000	8,000	8,000	12,000
Wyong/Tuggerah	3,000	3,000	4,000	12,000
TOTAL	526,551	646,000	758,000	1,000,000

4. Possible changes to the planning process

The sub regional planning process which allocates jobs, dwellings and population to local council areas needs to be informed by research into the labor and housing markets involving those sub regions. At present the Metropolitan Development Program (MDP) monitors housing development including reasonable rolling forecasts of the location of potential additional dwellings some eight or nine years ahead. This well-established program, operated in conjunction with local Councils is a valuable indicator of short-term trends, and its scope is to be extended to employment lands in the plan. It might be better to set indicative targets for employment and housing some fifteen years ahead and revise these as time goes by and the MDP shows the extent and type of actual and short-term development. Well-chosen strategic centres and areas could be paid special attention and support if it turns out that they are truly effective levers in achieving economic, social and environmental sustainability. The METRIX model could be modified to assist in gathering together the results of population and job estimates based on such research and monitoring.

The planning process does not adequately acknowledge local conditions, opportunities and constraints. The distinctive nature of existing communities in the regional cities is not acknowledged, and the rationale is that the 'planning system is being progressively **transformed from a process driven approach to an outcomes focused service**' (Iemma 2006a, emphasis in original). But inevitably, the employment capacity of centres, and the absorption potential of residential areas for increases in dwelling stock must also consider the opportunities for enhancing local communities and improving the quality of place and space. It also has to be informed and supported by the necessary augmentation or replacement of infrastructure.

Renewal and redevelopment processes will be driven not only by the opportunities offered by increased capacity offered in revised Local Environment Plans, but by the viability and feasibility of such change. This depends on such variables as interest rates, ownership, economic conditions, the availability of finance, and taxation and levy regimes. These conditions typically produce varying levels of activity over time, and are often very localized in particular suburbs. This characteristic of the renewal process does not seem to sit well with the confident targets which need to be met to fulfill the plan.

Conclusion

The strength of City of Cities is that it sets a direction and the first steps in taking the metropolitan economy forward so that it remains competitive. However it is an uneven strategy, set within a conventional plan-making process which projects Sydney forward in terms of an end-state distribution of population and jobs and arrangement of land uses and broad communications twenty five years hence. The work program to take things forward is based on achieving that scenario and contains a formidable list of matters to be resolved.

An alternative methodology would be to acknowledge that there are matters of primary importance that need further understanding and action within the

trajectory of economic development. Most conspicuously, housing conditions and social wellbeing need similar consideration to that shown to employment growth, and this understanding would progressively enrich and modify indicative targets and arrangements for living and working. This could be a major theme in sub regional planning

The complex and connected issues present in Sydney suggest that a better way of progressing with these plans would be to use shorter time periods, be more selective and better informed about fewer strategic opportunities, and address them through a range of necessary and appropriate measures to complement the arranging of built form, city structure and transport. This would incorporate the 'strategic choice approach' of Friend and Hickling (1997) of a planning process that identifies progressive decision-making as leading issues are shaped and connected. This is a continuous work program where uncertainties of different kinds are explored and resolved in order to shape and take commitments as necessary, both short- and long-term. Prominent among these uncertainties are community preferences and attitudes (now strongly manifest in growing unease about water and transport in Sydney) and the mixed substance and opportunism of political decision-making, as well as an understanding of the complex and fascinating dynamics of metropolitan growth and change – hopefully towards sustainability.

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2 SEEKING CERTAINTY: RECENT PLANNING FOR SYDNEY AND MELBOURNE

Abstract: *Recent metropolitan strategies for Melbourne (2002) and Sydney (2005) are reviewed in order to establish why they were produced, what their main proposals are and the kind of methodology used. The central question posed is whether they provide sufficient purpose and direction while at the same time acknowledging the uncertainties facing the future of both cities. It is concluded that in seeking certainty they are too prescriptive and deterministic in their provisions, but they do provide a basis for adaptation and adjustment to changing conditions. These challenges exist in terms of climate change, management and use of energy and water, transport, and the need for a national approach to planning the Australian urban system rather than the exclusively state documents that the strategies represent.*

Introduction

This article reviews metropolitan strategies which have been released of recent years for Melbourne called *Melbourne 2030* (Department of Infrastructure 2002) and Sydney titled *City of Cities* (Department of Planning, 2005), Australia's two largest cities. These two plans have much in common, but there are also important differences in emphasis and research content in the matters and concerns they cover. Their general themes are planning for a more sustainable future; developing advanced and innovative businesses which will be competitive and significant in the world economy; providing certainty for the property market; and a more compact city form.

The background to the plans is that they are effectively state government documents. Local government authorities generally have fewer functions, powers and resources than in the United Kingdom and most parts of Europe, and the metropolitan strategies are written for and by the state government. Similarly, although Commonwealth Government policies, such as immigration impact substantially on urban conditions, there is no present desire for any engagement in the cities by the Commonwealth Government. There is certainly no national view of the urban system and how it might be guided in the national interest. There is no present inclination to become involved in any of the urgent issues affecting some cities more than others, such as affordability of housing, and only reflexive engagement in matters that may be of national importance such as failures in urban transport systems, or port congestion.

Spatial planning, the provision of infrastructure and regulation of land use are the responsibility of each state government. This does provide the opportunity for coordination of these functions in their capital cities, and this has been achieved in varying degrees in the past. But, as well described by Gleeson and

Low (2000), the neo-liberal agenda now followed by governments has complicated this potential, leading to part-privatisation of functions, the transference of risk from governments to households, and public-private partnerships in many major projects. There are continuing examples of lack of coordination and accountability and poor service arising from these circumstances. 'Splintering urbanism' (Graham and Marvin, 2001) has its Australian counterpart.

The key question explored in this article is whether the methodology used in both plans does provide a strategic planning framework which provides effective purpose and direction but is also sufficiently flexible to deal with uncertainties. In doing this we pursue the implications of the strategies as state government documents, review the range of issues that the two cities are likely to face in the next twenty-five years (the planning period used by the strategies), and then comment on the appropriateness of the similar methodology employed by both cities in their forward planning.

The discussion is organised in four parts. The first briefly reviews current planning theory and paradigms relevant to such spatial strategies, together with examples of such plans from Europe as responses to urban complexity; increasing interconnection of cities and economies; the emerging issues of climate change and shortages of some forms of energy; and social harmony. In them space, society and governance interact, engage and reciprocate in the way that Gleeson et al (2004) outline in a similar socio-theoretic analysis of metropolitan planning in Australia.

The second part discusses the circumstances that caused the two metropolitan strategies under review to be constructed and the main drivers of their content. The third part describes and comments on their provisions. Both cities plan for a population total projected forward for a quarter of a century and devise a compact city form and structure to accommodate this distribution. Because of space limitations this article concentrates on the drivers of the plans and their influence on how metropolitan form and structure, transport and governance (including financing) are treated. This is done through a comparison of the two cities showing their differences as well as their common themes.

A fourth part examines the changing urban environment in which the two strategies are now placed and examines if the planning process followed in them is adequate to address these fluid conditions. In the light of this, the paper ends by suggesting that important changes could be made to the strategies if they are to provide appropriate direction in an environment that has already changed remarkably since they were formulated. This may largely be in ways that reflect the European experience.

1. Recent theories and examples of strategic planning

Given the evolution of planning theory concerning metropolitan strategies, it is appropriate to place *City of Cities* and *Melbourne 2030* in that context. Recent writers have both complained about the lack of adequate planning theory and constructed new ones (Hillier, 2006; Harper and Stein, 2006). Hillier proposes a

'multiplanar' theory which bridges the abstract with the physical in a process of creative experimentation. It is normative, inclusive and dynamic, without closure. Its long-term vision is investigating "virtualities unseen in the present; the speculation of what might happen", but with "temporary inquiry into what at a given time and place we might yet think or do and how this might influence socially and environmentally just spatial form" (Hillier, 2006:318). In less philosophical vein, Harper and Stein construct a 'dialogical' planning paradigm which lies between modernism and post-modernism. It is liberal (with the autonomous individual as central), pragmatic, incremental, critical, communicative and political, offering a more instrumental approach to normative purposes. Much of this takes place within the transactive planning process shaped by Healey (1996, 2006) and others (Madanipour et al 2001), with its logical extension into discourse analysis (Healey, 2000). In summary:

there is a need for a) a multidimensional, complex understanding of space, and b) new ways of negotiating how society should shape and influence the myriad of urban actors who mobilize to transform spaces

(Madanipour et al 2001: 3)

All these construct sponsor in one form or another, a creative ongoing dynamic dialogue between space, society and governance, such as that described by Richardson and Jensen (2003). Interestingly, both Richardson and Jensen and Hillier cite the European Spatial Development Perspective as an example of their arguments. Though advisory, it is claimed that the Perspective is influential in shaping spatial planning. Tellingly it was ten years in the making but provides a set of "clear spatially transcendent guidelines" (Committee for Spatial Development, 1999:7) with each member state implementing the document in its own fashion. The Australian variation on these concepts is best represented by Gleeson et al's (2004) socio-theoretic analysis of Australian metropolitan strategies where they identify five key interacting themes in the search for urban sustainability – policy, space, planning governance, finance and democracy.

We turn to more tangible examples concerned with metropolitan planning. Albrechts et al (2003) have summarised driving forces behind recent European strategic spatial planning as including inter-city competitiveness; new financing imperatives arising from government budget reductions; new forms of governance involving decentralization; formation of alliances and restructuring of welfare state organization; and the diffusion of (new) principles of spatial development across Europe by the discourses and practices of a trans-European spatial planning policy community. They also note the importance of socio-cultural and lifestyle changes in focusing voter and lobby group attention on environmental sustainability.

Following this approach, Albrechts (2004) has espoused a 'four track' approach involving four types of rationality:

value rationality (the design of alternative futures), communicative rationality (involving a growing number of actors – private and public – in the process), instrumental rationality (looking for the best way of solving the problems and achieve the desired future) and strategic

rationality (a clear and explicit strategy for dealing with power relationships

(Albrechts, 2004: 752).

These changes in metropolitan planning issues and context have, it is argued (Albrechts, 2006; Albrechts et al, 2003; Friedmann et al, 2004), generated a move away from modernist end-state predict-and-provide plans toward a less deterministic strategic spatial planning. Albrechts (2006) sees the main components of the latter as selectivity in choosing decisions and actions; a 'relational-annex-inclusive' quality that involves a full range of citizens; integration of relevant departments and agencies; development of a vision; and an action orientation`. As a consequence, there is a change in the outputs of metropolitan and regional plans. Policy maps are absent or very generalised, with the central purpose of many 'new' strategic spatial plans being to help frame activities of stakeholders to achieve shared concerns about spatial changes (Albrechts, 2001). More generally, Friedmann argues that since strategic planning is a process, the output should be much more than merely a plan document or vision statement (Friedmann et al, 2004).

Albrechts's analysis of eight strategic plans from Europe and one from Perth (Australia) indicates those plans show some shift towards his normative criteria for strategic planning (Albrechts, 2006). Most cases show a shift away from traditional technocratic statutory planning with its regulation of land use, towards a more collaborative approach. Even so, Albrechts concludes that the eight strategies have a 'considerable way' to go before meeting his normative criteria for strategic spatial planning (Albrechts, 2006: 1166). The recent London Plan (Greater London Authority, 2003) similarly shows 'new' spatial strategic planning features such as an action orientation and inter-agency cooperation (Newman and Thornley, 2005), and a fairly schematic approach to land use control. Nevertheless, the priorities of the Plan were controlled by politics, with business interests having a significant influence on the agenda and wider consultation having relatively little influence (Newman and Thornley, 2005: 147-148). The Hanover city region plan (1996) is an earlier example, with the spatial plan itself incorporating a certain degree of abstraction with its conceptual ring transport routes and land uses shown at a broad brush level followed by the formation of a regional development forum and a new level of regional government (Albrechts et al, 2003). Even here, old-style deterministic planning detail has been added to the city region plan through a legal addition that sets the position of retailing at all levels.

Thus contemporary strategic spatial plans for European cities have generally moved away from traditional end-state determinist plans toward more flexible, inclusive and action-based outputs, although retaining some elements of old-style modernist planning. There are various difficulties involved in putting new planning ideas such as those encompassed in the 'new' strategic spatial planning. These include lack of experience, lack of resources and skilled people, lack of time, local governance fragmentation, and lack of agreement between regional actors on causes and targets of regional structural change (da Rosa Pires et al, 2001). More broadly, there are tensions between ever-increasing uncertainty and the associated need to retain flexibility regarding future options (Hyslop, in Friedmann et al, 2004), and demands by investors for

older-style plans that deliver more certainty and direction about the spatial pattern of future development.

2. The reasons for and the drivers of the strategies for Sydney and Melbourne

At the beginning of the new century both Melbourne and Sydney faced the need for new plans and policies about metropolitan growth and change. Both cities needed important and connected decisions to be made about the distribution of future residential populations and jobs, about travel and catching up on the neglect of infrastructure needs, particularly in public transport in the 1990s.

When a new Labor government came into power in Victoria in 1999, it launched a series of planning initiatives including a State Strategic Plan called *Growing Victoria Together*, and a new metropolitan strategy. *Melbourne 2030* launched in 2002 was based on a careful process of investigation and consultation. In Sydney, in the early 2000s a series of mishaps and performance failures concerning public transport was accompanied by increasing road congestion, some shortages of land for outer suburban growth, and sharp rises in property values affecting housing affordability dramatically. This was accompanied by a downturn in the economy of New South Wales relative to the resource-rich states of Queensland and Western Australia, and some emerging anxiety about the performance of Sydney as a global city. There was considerable public pressure from the media and the Property Council of Australia for a 'new blueprint' for Sydney.

Dominating both plans, are firstly the drive to shape Sydney and Melbourne so that they are better able to compete in their own national economy and on the world stage, and secondly the desire for certainty on the part of business investors and the property industry. These themes are more strongly adumbrated in Sydney, perhaps because of the later dating of its plan, and the further development of some of the ideas contained in the Melbourne strategy by people involved in both. It does mean the strategies are directed to an outside world and there is little appreciation of or engagement with the national urban system of which the cities are such important components.

Economic competitiveness

Early research for *Melbourne 2030* was concerned with globalisation and the strengthening of economic competitiveness. In a paper dated May 2000 a consultant report (SGS) discussed the influence that urban policy and metropolitan strategy might have on the various drivers of economic competitiveness and concluded that the most important policy 'levers' were:

- road network planning;
- public transport policy;
- transportation pricing policy;

- activity centres policy;
- employment zone policy and standards; and
- airports.

The report became Technical Report 3 in *Melbourne 2030*. It was also recommended that the clustering together of advanced businesses would help their functioning and speedy response to the information flows on which they depended. Thus *Melbourne 2030*:

supports the development of an innovation economy by encouraging the expansion and development of logistics and communications infrastructure. It will support the development of business clusters, and work to help approval processes for industry sectors and developments targeted under the Government's Innovation Economy policy. It will also promote a physical environment that is conducive to innovation and to creative activities.

(Department of Infrastructure, Victoria, 2002: 87).

The same consultants delivered a report to the then New South Wales Department of Infrastructure, Planning and Natural Resources in June 2004 called *Sydney's Economic Geography: Trends and Drivers*. This drew attention to the importance of knowledge workers in advanced business enterprises: the creative innovators and entrepreneurs of Florida (2004). It argued they were relatively footloose and would locate in places which were highly accessible to the outside world; had good business services; and which offered lifestyle assets including good entertainment, cultural activities and higher education. They were also attracted to places that were pleasant to live in - and had the income to do so.

The conclusion drawn from these later studies was that for Sydney to retain its economic competitiveness on the world stage, it needed to fashion those urban conditions that would attract advanced business activities and innovative people. It was argued that a more compact city, using the urban policy levers cited previously for Melbourne, together with good place management and urban design would enhance Sydney's attractions in this regard.

Certainty

While providing certainty is part of the Melbourne plan as will be seen from its detailed provisions, Sydney was strongly influenced by the demand of the property industry for certainty. The Property Council for Australia, based in Sydney published a public discussion paper *Initiatives for Sydney* (Property Council of Australia, 2002), in which it outlined 'Sydney's economic drivers' which needed to be supported by:

- concentrating employment in Sydney's various centres;
- ensuring sufficient supply of 'employment lands' for business parks, lower density manufacturing, distribution, storage and bulk retailing activities;

- higher density dwelling development focused on sub-regional centres; and
- better building design.

The November 2004 publication *Metro Strategy: a Property Council Perspective* (Property Council of Australia) further developed these ideas and suggested many measures which subsequently appeared in *City of Cities*. Not unexpectedly for Property Council initiatives, both documents were notably short on transport and communication.

3. The provisions of Melbourne 2030 and City of Cities.

Metropolitan form and structure

Australian cities have among the lowest densities in the world and are heavily car-dependent (Newman and Kenworthy, 1999). Both Melbourne and Sydney plan for a more compact urban form with increased residential densities concentrated around major centres in the suburbs while the dominant focus of activity remains the central city. This increase in density is supported by strengthened public transport, articulating nodes and corridors of higher density development. The main strategic elements of these policies are shown in Figures 1 and 2.

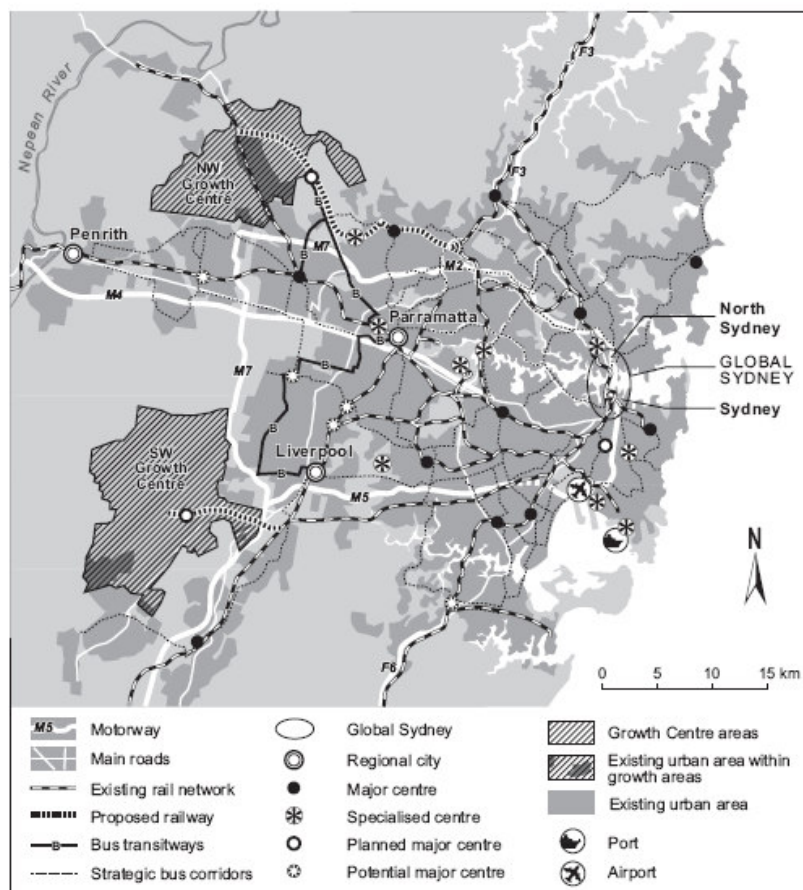


Figure 2. Main Elements of the Sydney Metropolitan Strategy, 2002



Melbourne

In the case of Melbourne, an urban growth boundary has been defined to encourage more compact and dense urban growth, and a more compact city is defined as the first 'key direction' of the strategy. However, this statutory boundary has already been varied and relaxed to some degree by parliamentary process. The 12 open areas that surround metropolitan Melbourne outside the growth boundary form 'green wedges' of countryside penetrating into the city as can be seen in Figure 1. They are a long-standing feature of Melbourne's planning, and their importance is again reasserted in *Melbourne 2030*.

In pursuing the principle of encouraging the gathering of advanced and specialised activities into groups, a map locates and identifies selected economic clusters and precincts. These include industrial areas, and advanced business and research locations concerned with specialised medicine, science, technology, engineering, multimedia and biology. These are specific sites where the government has started to invest in order to promote development, notably in biotech precincts around Melbourne University and at outer Werribee, a science and technology precinct at Monash (where the only synchrotron in Australia was opened in July 2007: one of 40 in the world), and in an information technology precinct in the Docklands redevelopment area.

These measures devised to encourage the growth of advanced businesses are linked with a long-standing feature of Melbourne's planning: that of defining major centres as concentrations of activity, and seeking to focus investment, transport links and jobs on them. It should be noted that despite this, they have not been particularly effective in the past in achieving their intended function and character (McLoughlin, 1992). In *Melbourne 2030* these have been carefully analysed and defined. There is a hierarchy with central Melbourne forming a 'Central Activities District', followed by 26 Principal Activity Centres, 82 Major Activity Centres and 10 Specialized Activity Centres.

These activity centres of different kinds are used as focal points for the building of medium- and high-density housing. It is assumed that this will lead to shorter journeys to work and less use of cars for travel, with improved public transport serving these nodes and corridors and the close proximity of a range of everyday services. Because of the importance of this, fairly prescriptive 'targets' are laid down in both cities in particular locations for the construction of such housing. *Melbourne 2030* divides future housing construction into three categories: greenfields development, strategic redevelopment sites, and dispersed urban (within existing outlying suburban areas together with a small amount of development around small rural townships). Recent new dwelling starts in each of these categories amounted to 38%, 24% and 38% respectively. It is proposed there be a major reorientation of this pattern to 31%, 41% and 28% in the period 2001-2030.

Sydney

'Economy and Development' is the first section in *City of Cities* and argues that while Sydney is Australia's only global city this status cannot be taken for granted. It identifies and maps a number of knowledge and high skill industries in areas such as finance; information and communication; health and education; advertising, news and media; logistics and transport; and hospitality, visitor and cultural activities. It shows that many of these tend to cluster together and form specialist employment nodes. Most are concentrated in a 'Global Arc' linking the central city to inner suburbs to the north and south. There are accordingly, ideas of reinforcing these clustering propensities so that these activities draw strength from each other and build into effective drivers of innovation and competitiveness.

Accordingly, a strengthened centres policy defines the central business district south of the harbour together with North Sydney as 'Global Sydney'. The second biggest centre is Parramatta, a 'regional city' to the west, which has been a focus of investment and development for many years. Penrith in the outer west and Liverpool to the south west, now join it as regional cities as focal points for transport and jobs, and there is another such regional city at Gosford on the coast in the commuter belt to the north of Sydney. In addition the strategy designates nine specialised centres such as Sydney Airport, and 19 existing and potential major centres, each with over 8,000 jobs. Job targets are set for all these major existing or potential centres for the year 2031. All major centres are served by public transport (usually rail) and have sub-regional catchment areas. Sub-regional consultations following the strategy's publication have resulted in an agreed total of around 1,000 retail centres classified by type for local planning purposes. Complementing centres are corridors of three types:

- economic corridors: a Global Arc extending Global Sydney to the north west and also south to Sydney Airport; a motorway based corridor running west from the Airport to Liverpool; and a corridor running north-south in the west along that stretch of the orbital motorway;
- renewal corridors in areas that are run down in the inner and middle suburbs such as the Parramatta-central Sydney link; and
- enterprise corridors made up of strips of commercial or industrial activity along busy roads.

In Sydney, 60%-70% of the new houses needed by 2031 are to be located in existing urban areas amounting to 445,000 dwellings. Most of these would be in the form of attached housing in medium- or high-density configurations. The wider metropolitan area is divided into eleven sub-regions, and the number of potential dwellings by 2031 shown in each, as is the number of jobs. A later sub-regional planning process will allocate dwelling numbers to each of the councils making up the sub-region. Three of these sub-regions take the bulk of new construction in greenfields locations, mostly in the north west and south west growth sectors. Government plans for these sectors map out the detailed character of transit-oriented urban development in each sector involving a centres hierarchy, permeable street patterns, and residential densities graduated according to access to public transport and centres.

Transport

Melbourne

These changes in city form and structure are supported by and reflected in transport planning. In Melbourne the goal is set to raise public transport's share of motorised trips from the current level of 9% to 20% by 2020. The Principal Public Transport Network is to be extended to more adequately integrate Principal and Major Activity Centres as there are gaps in the system where many of the centres developed in the 1960s and 1970s were built around car-based shopping and commercial developments. There are similar proposals to those in Sydney for developing more strategic bus corridors across the city, linking major centres across suburbs. These initiatives are not as well developed as in Sydney where a 2004 Review of Bus Services identified a network of new bus transitways (Ministry of Transport, 2004). However, in contrast to Sydney, movement around central Melbourne is well served by tram and rail services, and although there are some capacity restraints on these, they are addressed in *Melbourne 2030*.

The transport proposals in Melbourne have been criticised (Mees, 2003). Major road and freeway building continues and there are questions about the proposed programming of improvements to public transport and the need for better management of buses and rolling stock. Ironically, an unexpected increase of 10% per year in the number of rail passengers in the last two years has caused overcrowding of trains and inconvenience generally. A government spokesman has been forced to state that he did not believe the rise in such passenger levels over the next three years would continue at the present 'abnormal levels' (Whinnett and Gardiner, 2007). The 2007/8 Victorian State

Budget contained substantial funding to specifically address this problem by buying more trains and training more drivers (Department of Treasury and Finance, 2007: 35). Contracts with private operators of the public transport system expire in November 2007.

Sydney

The main public transport component in the Sydney strategy is to link the major growth areas to the north west and south west directly to the central city by a new rail line involving a new tunnel for this purpose under the harbour. However this is not scheduled to be constructed until 2015.

There is an emphasis on more effectively linking centres, with cross-suburban services. The most significant of these is to establish a number of strategic bus corridors to connect centres with fast and frequent services. However the need to improve access by public transport within Global Sydney and how to do so, is not adequately addressed. Significant investment and construction in dedicated rail freight lines and inter-modal freight hubs is proposed to divert freight movement from roads and rail lines used for general-purposed travel. Much of this would depend on Commonwealth Government funding.

The transport proposals in *City of Cities* have generally been regarded as the least convincing. Sydney has a long history of promised improvements and major projects to strengthen public transport which have not happened. It is true that this lesson does appear to have been taken to heart – at least in the short-term - by the present State Government. It has used two state budgets to fund some of the capital projects needed and its improved Infrastructure Strategy (Office of Financial Management, 2006) for ten years ahead is based on *City of Cities*. It has also produced a considered and impressive Urban Transport Statement (lemma, 2006a), but there are continued breakdowns and disruptions to rail services in particular. At the same time the need to improve the present road framework and deal with so-called 'pinch-points' is proving costly and difficult to resolve.

Governance, consultation and implementation

Melbourne

In Melbourne, a far-reaching consultation process was held, involving meetings in all suburbs with a budget running into millions of dollars. *Melbourne 2030* has an extensive discussion of implementation procedures and processes where it identifies the strategic topics and issues that need to be infiltrated into local planning and state government activity and developer opportunities. An Annual Community Update is promised on this process.

Implementation mechanisms in the planning system are explained in a separate Advisory Note. These basically seek local government revision of its own plans to incorporate the policy intent of *Melbourne 2030*. To assist them in this, draft implementation plans have been prepared for the Urban Growth Boundary, Growth Areas, Activity Centres, Green Wedges, Housing, and Integrated Transport. However a recent report aimed at improving council planning policies has pointed to a disconnection between state policy and the reality of planning with little guidance or help given to councils (Millar, 2007). It also illustrated the long conflict between a state government planning for a denser

city and the resistance of local councils to such changes. Developers, in response have called on the Government to stand by *Melbourne 2030*.

As with *City of Cities*, *Melbourne 2030* seeks implementation through recognition of its strategic policy intent by state agencies through existing budget and corporate planning processes. Again, Activity Centres, Housing and Transport (including regional corridors) figure prominently.

Sydney

In general, there has been an increasing centralisation of planning powers and functions in the state government of recent years as it seeks to attract investment and development (Williams, 2007). In preparing *City of Cities*, the initial phases involved a strong attempt to involve the community but there was a clear break between this phase of seeking views and taking decisions. Well before the appearance of *City of Cities*, one commentator noted the dangers of combining an opening phase of 'governance through negotiation' with the following one of 'governance through hierarchy' and in:

switching from a negotiative to a hierarchic rationale in the middle of the process as one probably ends up getting the worst of both worlds ... (with) ... a high risk that the final Strategy will either be weak because it avoids the hot issues, or be a strong document that does take clear stances but then lacks the wide support for its successful implementation

(Kubler, 2005:36).

The relationship with local government and local planning is problematic. In the Sydney strategy, local government is largely an instrument of implementation where councils will work in sub-regional groupings to translate 'metropolitan region housing and employment targets spatially at a local level' (Department of Planning NSW, 2005: 255 which will then be used to prepare local environmental plans to a standard template. This it to ensure the 'planning system is progressively transformed from a process driven approach to an outcomes focused service ... (avoiding) ... interminable processes and delays' (lemma, 2006b :15, emphasis in original). This sub-regional planning is the most immediate strategy activity.

Table 1. The main characteristics of *Melbourne 2030* (2002) and *City of Cities*, the strategy for Sydney (2005)

	Melbourne	Sydney
Drivers		
Main purpose	Sustainability broadly based although economic competitiveness vital. Enmeshed with other plans	Sustainability interpreted mainly in terms of economic innovation. Driving Sydney planning
Ensuring certainty	Dominance of targets for population growth in a typology of centres to 2030. Transport proposals more indicative	Highly articulated and detailed land use and transport planning. Fixed targets for jobs and housing to 2031 by sub-regions major centres, and employment precincts

Main Proposals		
Metropolitan form and structure	Urban growth boundary (since changed) to encourage compact and denser growth. Green wedges penetrate into the city between lines of communication from central Melbourne. Long standing policies regarding activity centres reconfigured and strengthened to form a hierarchy of centres where jobs and future housing will be concentrated. In the period 2001- 2030 41% of new dwellings will be in major redevelopment sites, 31% in greenfields locations and 28% urban infill and small townships.	60-70% of new housing to be in existing urban area with two greenfields growth sectors in northwest and southwest. Compact city form with increased residential densities and concentrated employment round a hierarchy of centres. Innovative businesses located in an intensified central and highly accessible 'Global Arc'. More basic economic functions in the large suburban economy of Western Sydney
Transport	Central Melbourne services improved. Some freeway building to continue. Public transport extended to more adequately connect principal and major activity centres, although not so precisely articulated as in Sydney. Improvements in management and ticketing.	Strengthening of public transport through building of new rail lines to growth sectors and new rail connection under harbour. Strategic bus corridors link regional and major centres with fast and frequent services. Little attention to improving public transport in Global Arc. Dedicated new freight lines.
Governance, implementing, and planning process	A state government-led plan with little involvement of local councils in its formulation. They are seen as instruments of implementation rather than partners. Reconfiguration of local plans to a standard template to accommodate 2031 job and population targets. Supporting initiatives promised e.g. Innovation Strategy. Development levy for greenfields development. Strong links with budget processes and major projects at present. Depends on present strong ministerial leadership. Five yearly reviews.	More consultation than with Sydney but considerable local opposition. Enmeshed more with other plans e.g. housing than in Sydney. Plan's proposals to be recognised in operations and plans of government agencies and implemented by revision of local development plans. Links with state budget seem less proactive than in Sydney, but more direct investment and support for particular business precincts e.g. the only Australian synchrotron (\$A200m) at the Monash science and technology precinct, reflecting a broader economic planning base. First five-yearly audit now started (not review).

Greenfields development in the north west and south west sectors is planned and managed by a Growth Centres Commission (a development corporation under the Growth Centres Act). A levy is made on developers to cover much of the costs of the new infrastructure needed to support urban development.

Coordinating policies, projects and plans in the existing urban areas is less easy, but state agencies are to incorporate the metropolitan strategy aims and directions into their operations. The State Infrastructure Strategy and funding for capital works is to support the unfolding of the strategy, for example in ensuring that key infrastructure supports major centres of activity. As has been already noted, the two state budgets since the publication of *City of Cities* have largely followed this program up till now. An Innovation Strategy is being developed to facilitate the emergence, growth and clustering of advanced service and high tech industries.

Table 1 summarises the characteristics of the two strategies reflecting the headings used in this part of the discussion. *City of Cities* develops many of the principles used in *Melbourne 2030*, but they have evolved into a more prescriptive form, and the commentary in the table reflects this.

4. The planning process and a changing urban environment

Dynamic urban conditions

Since the two strategies were formulated, there have been important changes in urban conditions. The most significant has been the realisation that there are emerging constraints and limitations on the natural resources upon which metropolitan life is based. These relate to water, oil and the use of energy. In the last year there have also been dramatic shifts in the attitude of the Commonwealth Government to climate change.

The current response to water shortages in all Australian urban areas is a relatively recent issue. In all state capitals, water supply, management and use has become critical as drought has intensified and rainfall totals obstinately remain below the long-term average. *City of Cities* incorporates the Metropolitan Water Plan adopted in 2004 to see the city through the next 25 years. The Water Plan was heavily criticised for its reliance on seeking new sources of supply, rather than emphasising demand management and recycling. *City of Cities* was released in December 2005: the Water Plan was replaced by another in May 2006 which moved some way to respond to these criticisms (Government of NSW, 2006). The new Plan promised a process of 'adaptive management' as the impacts of climate change became more apparent and as various water supply, demand management and conservation measures were examined, experimented with and adopted or discarded. Recently the head of the Department of Planning has admitted that the metropolitan strategy should have taken more account of the challenges of climate change (Munro, 2007).

In the light of increasing price of oil, and the large carbon emissions coming from the overwhelming dominance of the private vehicle for travel and freight movement, the most serious issue is the car/truck-dependence of Sydney and Melbourne. *Melbourne 2030* is still equivocal in this regard despite its aims of integrating travel modes. The transportation proposals in *City of Cities* represent an amalgam of various plans and projects, based on trying to more adequately cope with present conditions. There is no systemic analysis of how

to move from travel and transport by private vehicle towards much more use of public transport. This will require a variety of measures including not only the building of medium- and high-density housing and business premises but pricing, regulation, provision of services and facilities, and management of transport modes. In March 2007 a transportation consultant developed an alternative metropolitan transport strategy for Sydney, which was offered as a 'new vision' to the state government by the 10,000 Friends of Greater Sydney (FROGS), a community based organisation created by the Warren Centre for Advanced Engineering which had previously conducted an extensive research study into transport in Sydney (Warren Centre, 2002). The Board of FROGS subsequently met with the NSW Transport Minister and emphasised that it was not a pressure group and wanted to work constructively with the Government.

Another factor in the increasing complexity and dynamism of urban conditions in Sydney and Melbourne is that of 'splintering urbanism' (Graham and Marvin, 2001). This particularly applies to infrastructure networks, on which the plans for Melbourne and Sydney are predicated. These are to varying degrees, part-privatised, and there are inevitably problems in coordination with urban growth and change, and level of service provided. Added to this is the increasing importance of more regionally- and locality-based systems of water recycling and stormwater management and harvesting. The move to domestic participation in water recycling and use, and solar energy production and use could lead to significant reallocation of resources for infrastructure. There are signs of increasing departure from the extension of metropolitan-wide monolithic service systems and their associated technologies and protocols.

Melbourne 2030 and *City of Cities* are dependent on massive renewal and redevelopment processes to accommodate most of future population growth. The population targets represent a top-down approach and it is not really known if they can be reached in any sensible fashion. Only the most preliminary, tentative and ball-park figure have been suggested about the costs of redeveloping and intensifying the activity centres in Melbourne (McDougall, 2007), and Wilmoth (2005) has warned that the obvious needs of infrastructure provision for diminished greenfields growth may divert attention from the more complex and localised needs for infrastructure renewal in the existing urban area. There is little appreciation of the infrastructure support and change that will be necessary to accompany this intensification of density and activity, and much reliance on the dubious assumption that there is spare capacity in often ageing networks. Australia has little experience of the complexities of widespread redevelopment processes such as those that have taken place in Europe, and has adopted a supply led capacity approach to planning urban growth and change.

The planning process

In the need to establish certainty and direction, the planning process used in both Melbourne and Sydney uses a rational-comprehensive model (Taylor, 1998) with sophistication and elegance. This certainty and direction is most pronounced in Sydney. The home page for the metropolitan strategy calls it 'The NSW Government's Long Term Plan to Maintain Sydney's Role in the Global Economy and to plan for growth and change'. This makes - it almost by default - an economic development plan for Sydney, and raises questions about

the balance of other considerations (Bunker, Holloway and Randolph, 2005). In seeking certainty, both cities provide one blueprint for the distribution of population. Sydney also includes job targets for all major centres, influenced heavily by previous representations from the Property Council of Australia.

This blueprint drives each plan. In Sydney the population totals for each sub-region are being allocated to council areas, which then have to produce zoning configurations which can accommodate them. The environmental impact, traffic generation, necessary infrastructure provision, design challenges, heritage protection and social effects are unknown until that detailed planning takes place. Many councils have maintained this should have been done before the targets were imposed, and any necessary adjustment then made to the numbers.

In Melbourne, the first five-yearly audit of *Melbourne 2030* has been started to investigate *inter alia* the effectiveness of local government's role in implementation of the plan, how to provide greater certainty for residential development, and advice on measures to encourage investment for business and living in activity centres. The audit cannot consider fundamental changes as the view is that *Melbourne 2030* is a 30 year strategy that should run its course.

5. Adapting the strategic planning processes for Sydney and Melbourne

The conclusion reached in the argument of this paper is that metropolitan strategies in Australia need to move towards the principles and processes of strategic spatial planning described in the first part, and now under development in Europe. This is not meant as an imitation of what might be good practice, but a recognition that Australian cities face the same challenges and issues, particularly that of integration in an evolving urban system. Both the strategies for Sydney and Melbourne have a modernist character partly based on their status as state government documents. Australian cities need to take on a more complementary and supportive role in the space economy of the nation and in dealing with the global economy. This issue and the emerging challenges of climate change, energy use, water management and social equity in the responses to these challenges, demands a national approach.

It is possible, however to suggest adaptations the present strategies so that they progress towards the kind of paradigm outlined by Gleeson et al (2004), and exemplified in Europe - although that does involve moving to another level of abstraction.

In that regard, three things are needed. A shorter time perspective is needed in organising metropolitan growth than the 25 or 30 years currently used. This would better reflect the increasing rate of economic and technological change; the urgent challenges provided by climate change and the management and use of energy and water which need careful, evolving and responsive measures to address them; and the near-impossibility of forecasting long-term social, political and economic environments.

Second, the hints of physical determinism in current strategies need to be qualified by better links with service delivery, regulatory guidance and funding measures as well as arranging land use location, density or mixture. Life in the suburbs depends a great deal on the principles determining the provision and funding of public education, health, access and transport (Gleeson and Low, 2000; Gleeson, 2006) as well as the nature of the built environment. Economic development and job opportunities reflect the availability of education, training programs, the dissemination of best practice, proficiency in English, working conditions and child care facilities as well as appropriate infrastructure and location (Dodson and Berry, 2004). Natural resource management, conservation of biodiversity, control of pollution and ecological sustainability require conservation, enhancement and management measures reflecting natural systems.

Third, continuing dialogue with local communities, and place management and enhancement is necessary not only to respond to strategic imperatives, but to feed back the particular opportunities and pitfalls that shape the unique character of every locality. The finer-grained and intricate character of urban conditions is one of the notable features of recent urban research (Randolph and Holloway, 2005; Fagan and Dowling, 2005). The lack of recognition of this is conspicuous in *City of Cities*, and shows little appreciation of social issues, imbalances and patterns of difficulty, deprivation and disadvantage in both Sydney and Melbourne (Bunker et al, 2005; Randolph and Holloway, 2005).

Both cities have effective Metropolitan Development Programs which monitor housing development and provide reasonable rolling forecasts some eight to ten years ahead. These well-established programs, operated in conjunction with local councils are a valuable indicator of short term trends and operate in a time span that can ensure essential infrastructure is in place as land is released and development takes place. Their original function was designed to deal with suburban expansion, but their scope has been extended to the more difficult task of estimating future housing potential in existing urban areas and to employment lands. It needs to go further and outline necessary infrastructure investment in these renewal areas.

This operation could take place within more *indicative* forecasts of future residential and employment growth some fifteen or so years ahead with fewer locations selected for more detailed and careful analysis, and if this proves favourable, then linked specifically and programmatically to the infrastructure programs and innovation strategies that are supposed to accompany and support the present long-term strategies. These indicative forecasts could similarly be developed in cooperation with local councils as they assess not only the apparent capacity of their areas in terms of space and infrastructure, but take account of social impacts and how local character can respond positively to the processes of redevelopment as well as the final outcome.

These suggestions, while moving towards the processes of spatial shaping discussed in the first part of this article attempt to anchor these principles in the concepts of progressive commitment outlined in the strategic choice approach of Friend and Hickling (1997) where continuous decision-making takes place as uncertainties of different kinds are clarified.

Conclusion

Australia has been regarded as having the potential for effective metropolitan planning as the capital cities remain the dominant economic and urban entities in each state. This means that state governments could bring their wide range of powers and responsibilities to bear on coordinated action in metropolitan growth and change. However, this potential has been eroded in recent decades for a number of reasons. These include the withdrawal of the state from some infrastructure and service provision; increasing centralisation of power and financial resources in the Commonwealth Government whose actions increasingly impact on city conditions but which takes no interest or responsibility in urban affairs; globalisation; and changing social, cultural and demographic circumstances

There are significant uncertainties which undermine the apparent confidence and certainty provided by the strategies for Sydney and Melbourne. Increasingly, issues about climate change, transport and energy and water management will inescapably draw the Commonwealth Government into national and international agreements which will affect the capital cities in which most Australians live. This could also help redress the imbalances in *Melbourne 2030* and *City of Cities* where the concern with being competitive in a globalising world ignores the increasing interconnection of the Australian spatial economy. As has been argued, "Urban economies are fundamentally interdependent. If one city grows, people in other cities generally become better off" (Urwin, 2006:1).

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3 A PLENITUDE, PLETHORA OR PLAGUE OF PLANS: STATE STRATEGIC PLANS, METROPOLITAN STRATEGIES AND INFRASTRUCTURE PLANS?

Abstract: *In the last five years, planning strategies have been released for the five mainland capital cities in Australia. This paper examines them in conjunction with state strategic plans and infrastructure strategies in South Australia and New South Wales, with which they are linked in most states. These two states have probably the most complete and current suite of all three documents, although other states such as Queensland have recent proposals of this kind, sometimes closely linked. The question arises as to how appropriate each of these plans is in its own right, how effectively it supports or reflects the others, and how robust it may be in dealing with uncertainty and the transition towards sustainability. The paper examines the characteristics of each of these plans the ways they are linked, and how they affect each other. The paper concludes that each of these three plans is useful in charting a direction for change. But each is subject to changes of government, in community attitudes and environmental circumstances. Moderate modifications to them and their relationships might improve the longevity and effectiveness of such instruments.*

Introduction

While most states have recently formulated state plans, metropolitan strategies and infrastructure plans, there has been little examination of the links between them. While this paper is primarily concerned with the effectiveness of metropolitan planning, commentators in South Australia have already noted that metropolitan strategies have to take account of and be associated with important initiatives in infrastructure planning and strategic planning for the state (Hamnett, 2005; Hutchings and Hamnett, 2006). That inevitably leads to a series of questions about this strengthened suite of planning proposals. Are they consistent one with another? Do they support each other? How dynamic, flexible and relevant are they? Do they have distinctive roles and relationships? Where are they coming from? Does the first of them have priority or influence over the others? Which seem the more influential in charting an uncertain future? In particular the question has been asked of state strategic plans as to how much of them are substance and how much of them is spin.

This paper reviews recent plans and strategies of these three types in South Australia and New South Wales. These two states have the most recent examples of them, and the commonalities and differences between them should be of interest and significance. Organising such a description, commentary and

interpretation in the most insightful and constructive way is not easy. After a general introduction, this paper first considers each of the three documents as unrolled in South Australia in the order in which they were produced. It ends that section by commenting briefly on their perceived roles and relationships. The next part carries out the same process for New South Wales. A third part then draws some conclusions from the exercise by comparing the character of each plan in the two states, and the final part hazards some opinions about how the characteristics of each plan might be strengthened both in their own function and their support for each other. Because of space limitations, the documents can only be described in terms of their general characteristics with particular attention to their constructed or potential relationships. More detailed accounts and critiques of Sydney's metropolitan strategy have been published elsewhere (Searle, 2006; Bunker, 2007) and these act in part as a basis for this paper.

In this interpretation, discourse analysis is used to establish the presence of particular themes. This can be done in two ways: in identifying the dominant themes in socio-political space and using appropriate documents to illustrate the nature of these discourses, and in analysing documents themselves to ascertain their inherent discourses in the way Searle (2004) reviewed the 1994 and 1999 metropolitan strategies for Sydney. By using both these deductive and inductive approaches, it is hoped to combine textual analysis with an understanding of the political, economic and social context within which debates and arguments about the nature and content of policy take place, in order to gain insights into the nature of the plans and their strengths and weaknesses.

In both South Australia and New South Wales the vision is to shape a more sustainable society and capital city. Within this framework, there are discourses about:

- a neo-liberal political economy (Gleeson and Low, 2000) within which the state has an important part to play (McGuirk, 2005);
- a competitive economy driven by globalisation;
- a sustainable community;
- ecologically sustainable development; and
- a compact city.

Some of these discourses are dominant and some are recessive with struggles at the boundaries and overlaps between them (Vigar et al., 2000 Chapter 8; Searle, 2004). There are important differences in emphasis and character between the cities in the dominant discourses in the three types of plan. Economic competitiveness dominates Sydney so that *City of Cities* (NSW Department of Planning, 2005), Sydney's metropolitan strategy is called the "NSW Government's long term plan to maintain Sydney's role in the global economy and to plan for growth and change" (www.metrostrategy.nsw.gov.au). Structuring and articulation of the compact city is the spatial instrument used to accomplish this. The social consequences are assumed to be beneficial trickle down effects in terms of 'fairness' in better proximity to jobs and services. Similarly access to open space, improved attention to biodiversity, better

management of water and waste, and more use of public transport will mark a transition towards environmental sustainability.

In South Australia, 'Growing Prosperity' is the first of the six objectives in South Australia's Strategic Plan. 26 of the 98 targets set relate to that objective with many actions in other areas deployed to that end, so that the Premier has identified the guiding thread of the plan as 'a knowledgeable community' (Government of South Australia 2007, p.4). While a more compact city is a theme in the metropolitan strategy for Adelaide, the role of the plan is a more modest one of land use and development to accommodate "more people living and working here" (Government of South Australia, 2006 p. iii) in the pleasant urban environment that Adelaide provides. There is much attention to the management of natural resources with "an impressive richness of analysis, particularly in relation to water, waste, energy, biodiversity and their links to urban development (Hamnett, 2005, p. 15-6) together with a separate plan for the rural-urban fringe.

With these reference points established it is appropriate to move on to examine each of the documents in turn in each of the states in sequence.

1. The South Australian Plans

The South Australian Strategic Plan, 2004 and 2007

When the Rann Government was first elected to power in South Australia it established an Economic Development Board to formulate an economic development plan for the state. The Board produced its report in May 2003 called *A Framework for Economic Development in South Australia*. Among its proposals was a recommendation to prepare a wide-ranging State Strategic Plan. The Strategic Plan was compiled and launched by the Premier in March 2004. It was very much an initiative by the state government and it does not appear government departments were extensively consulted in its preparation. The Plan articulated six key strategic interrelated objectives: growing prosperity; improving wellbeing; attaining sustainability; fostering creativity; building communities; and expanding opportunity.

Strong drive and purpose characterise the Plan. In April 2005 an Executive Committee of Cabinet was formed in order "to drive implementation of the plan through the public sector in an attempt to provide sharper political leadership to the process while retaining input from other influential community leaders" (South Australia's Strategic Plan Audit Committee Progress Report 2006, p.5). At about the same time a Strategic Plan Update Team was appointed to revise the Plan. This time it involved extensive consultation as the previous Plan "was sometimes perceived to be a plan for government' and not necessarily for the state" (Government of South Australia 2007, p.8.)

The revised Plan was launched in January 2007. Some new areas of focus were added including early childhood, a sustainable water supply, multiculturalism, cultural engagement, employment participation, work-life balance and venture capital investment. It was also expanded to take much

more account of Aboriginal people. The revised Plan also recognizes more the interrelated nature of objectives and targets and identifies key synergies and interactions in cognate targets. Understandably, given the relatively small and isolated economy of the state, most emphasis is given to suitable economic growth. The new Plan promises that this will be complemented by the development, over time of regional strategic plans that are aligned with the State Strategic Plan (p.40). However there is no spatial or locational analysis or differentiation built into the Strategic Plan, and the Metropolitan and other Planning Strategies not considered.

The Strategic Infrastructure Plan for South Australia

Among the recommendations of the Economic Development Board in its report of May 2003 was the establishment of an Office of Infrastructure “to set priorities, in line with South Australia’s Strategic Plan, across competing infrastructure needs and to coordinate planning and delivery of public and private sector infrastructure initiatives to support the development of the State” (Department for Transport, Energy and Infrastructure website accessed 10/05/07). Its first task was to produce the *Strategic Infrastructure Plan for South Australia 2005/6 -2014/15*.

It is an impressive piece of work and has a state volume (within which there are some important statements about regional and area-based challenges and opportunities) and a regional volume of comparable size. They were published in April and May of 2005 respectively. Like the Metropolitan Strategy, the Infrastructure Plan lists the State Strategic Plan targets and reviews 14 subject areas to show how they are deployed and addressed. It is comprehensive in scope and aims to cover all aspects of the state’s infrastructure – “physical built assets, delivery of infrastructure for social services and natural heritage” (p.4). Each subject area is discussed in terms of background, challenges and opportunities, strategic priorities and a number of projects listed in order of priority; who gives the lead; and whether they fall in the first or second half of the planning period to 2014/15.

Nevertheless economic development understandably takes priority so that “The effective and efficient provision of infrastructure is a key to sustaining high rates of economic growth and productivity improvement. It is critical to achieving the central economic target of the SASP, which is to treble exports by 2013.”(p.5).

The Plan has frank discussion about often hidden parameters- such as the fact that the energy sector together with some transport and water services is largely privatised and under different imperatives to that where public authorities provide and distribute energy, so that investment and project initiatives are differently shaped and driven (p.125).

It provides a critical mediating role between the improvement, enhancement and connection of infrastructure systems of all kinds – including service networks and organization – and the physical assets needing to be built to reflect and shape them. So the projects it lists include not only substantial spending on major public works such as the Osborne maritime precinct (p.60), but also building information processing networks requiring hardware and software (p.114), investment in vocational educational training (p. 78), and

“changes to the state’s planning system to increase housing densities in strategic locations and to increase the supply of affordable housing in locations that have access to infrastructure and services” (p.61). These initiatives obviously require the recruitment, support and continued employment of skilled personnel.

The Plan contains an important section on delivering the Plan, including major discussions on working with the private sector. Rather than seeking to coordinate project bids between competing departments and portfolios, the Plan outlines a new planning and delivery framework where a strategic case is first established to identify a particular service need and the services required. This produces a “short list of projects that have been adequately scoped, and are then approved by the government for further detailed analysis” (p.35). From this a project or projects is substantiated and assessed, the method of funding and appropriation (if any) determined and the project delivered.

The Plan pays considerable attention to matters traditionally associated with land use and spatial planning. It notes the importance of urban regeneration and renewal in the future growth of Adelaide leading to higher residential densities in some areas (p.19). It mentions the need for infrastructure audits in areas undergoing change (p.11). Under ‘Land’ it seeks to “increase housing densities in strategic locations and to increase the supply of affordable housing in locations that have access to infrastructure and services” (p.61). However the section on housing is largely concerned with placing public housing on a more sustainable basis through re-use, renewal and redevelopment noting the “presence of tenants with complex and high needs will contribute to lower levels of community sustainability and wellbeing (as is already evident in many areas)” (p.119).

There is no material on the characteristics of the renewal process which is expected to be dominated by the private sector, or on the likely outcomes of such a process and how it might best be handled by local councils. In conclusion the Plan does begin to play the connecting and mediating role between abstract objectives, how they might be pursued through investment in different kinds of infrastructure, the priorities in that, and who might carry the action and provide the funding.

The Metropolitan Strategy for Adelaide

This strategy was finally released in August 2006 after a draft for public consultation had been circulated in April 2005. There is a considerable difference between the draft and the final version. That reflects the growing importance of the State Strategic Plan and Infrastructure Strategy (Hutchings and Hamnett, 2006); dealing with the urban consequences of the State Plan’s target of a state population of 2 million by 2050; and some watering down of original proposals. The previous function of the metropolitan planning strategies appears to have been in part appropriated by these other plans, and Planning SA finds itself a part of the Department of Primary Industries and Resources SA, one of the strangest bedfellows in terms of the long history of planning’s different organizational partners.

The Strategy adopts the principles espoused in other metropolitan strategies - a more compact city whose envelope is shaped by a growth boundary; increases in residential density, particularly by medium- and even high-density housing around activity centres and along major public transport routes and major roads; relying on processes of urban renewal and redevelopment to provide an increasing proportion of housing relative to new greenfields development; improvement in public transport; and improvements to the arterial road system, particularly aimed at facilitating freight movement into, around and out of the city by road, air and sea.

The Strategy contains extensive reference to the State Strategic Plan and incorporates a detailed table showing where the Strategy's policies meet the Plan's targets as Appendix 3. The Strategy describes the purpose of a whole range of government initiatives, programs and policies which unfold and support the functioning of the city. This is reflected again in the extensive cross-referencing to associated policy and legislation, for example public health, broadband strategy, housing plan.

The State Strategic Plan places strong emphasis on population growth and targets a population for the state of two million by the year 2050. This places the excellent population and housing forecasting service in Planning SA in a dilemma as ABS projections and its own more expansive 'medium-stable migration projection' shows lesser rates of growth than this. The solution is ingenious. No targets are set for population and urban growth. Instead a series of output-based and outcome-based indicators are proposed for which baselines are to be established so that some identified targets may be set "where a causal relationship with the Strategy can be identified" (p.112). *Output-based* indicators will be derived to measure the performance and progress of the policies detailed in the Strategy, of which there are 24. *Outcome-based* indicators measure the performance in relation to - the managed growth of the urban area; greater integration between water and land use planning; greater integration between transport planning, energy provision and land use; and integrated waste management. While the Strategy suggests that such indicators could be similar to those in the State of the Environment Report released every five years, for them to have any long-term relevance then this also has to take place within an adaptive management framework.

Further, instead of the kind of crisply articulated metropolitan framework provided in the Sydney strategy, there is an "Adelaide Metropolitan Spatial Framework" described as "a conceptual framework that has been designed to reflect the existing urban structure and identify the common land-use patterns that will accommodate a range of population projections, and the possible resultant housing, employment and service needs" (p.25).

Finally the well-established Residential Development Program becomes Appendix 4 of the Strategy. It uses two different population projections for the period 2001-2016 prepared in 2002 and based on 1996 data. The lower one was the one considered most likely at the time of preparation and the higher one included to take account of the government's policy to increase population contained in the Strategic Plan. These forecasts are broken down into likely dwelling construction divided into that to be expected by new construction on broadacre subdivision, suburban redevelopment, retirement villages and apartment buildings. (p.7 Appendix 4). This then provides the basis for

estimates of dwelling construction by six sub-regions constituting the Adelaide Metropolitan Region and some of the Outer Metropolitan Planning Region. This is divided into the proportion of detached as opposed to attached dwellings for the years 2003/4-2007/8. It provides a reasonably robust estimate of likely future demand and supply of housing in the short term.

The result is that the Metropolitan Strategy looks like an intelligent holding operation. It has also been expanded to encompass, appropriate or support a whole range of social, economic and community needs such as “Match locational and delivery of health and community services and facilities with the needs of the community” (p. 59). Similar exhortations address other actions - ‘Encourage...’, ‘Improve...’, ‘Reinforce...’ But it does not provide any analysis or direction as to where areas of multiple stress and disadvantage may be and how locational or land use policies might seek to address them along with other measures.

Comment on the relationships between the planning documents

It is difficult to avoid the conclusion that Planning SA and the Metropolitan Strategy has not come out well in these Rann initiatives. They are squeezed between the State Strategic Plan and the Infrastructure Plan. The Infrastructure Plan contains much of the material one would expect in a metropolitan strategy, but strongly linked to methods of implementation. Not only do the projects in the plan accordingly promise much more in terms of *actual happening* in the next few years than the somewhat vague statements in the Metropolitan Strategy, but as has been noted the Infrastructure Plan even includes some of the more exhortational measures and administrative proposals that traditionally populate metropolitan strategies.

On the other hand, the Metropolitan Strategy has to reflect the more abstract ambitions of the State Strategic Plan, so that its major section on policies reflects how the Strategic Plan’s objectives are met in 24 policy areas in a metropolitan setting. Another consequence is that the Metropolitan Strategy has a ‘Spatial Framework’ with annotated initiatives in particular areas, without much indication of intensity, priority or likelihood. Further its admirable Metropolitan Development Program is shaped to show that its short-term projections of population and dwelling growth in Adelaide are not inconsistent with the longer term ambitions of the State Strategic Plan for a population of two million by 2050.

2. The New South Wales plans

The New South Wales Metropolitan Strategy, ‘City of Cities’

This document was produced in December 2005, after a long period of public agitation for a metropolitan plan. While this was a general public concern, it was particularly advocated by the Property Council of New South Wales which sought certainty for investors particularly for businesses and the property development sector. There were serious shortages of land for residential

development and for employment lands for factory and business estates and wholesaling/distribution activities. In addition there was growing disquiet about transport, with failures in the public transport system and increasing congestion and disruption on major roads.

The overall strategy is a crisp definitive one. Regarding the economy and employment, it provided land, locations and incentives for the addition of half a million jobs by the year 2031. The spatial expression of this economic development is the main source of growth for centres and corridors with employment being concentrated in 27 strategic centres served and connected by improved public transport corridors, and employment lands located close to the orbital motorway network. The targets for these centres reflect a number of Property Council publications of previous years setting a target of 25% of employment in such centres.

While 30-40% of new housing to house population increase to 2031 is to be in greenfield sites mainly in the north-west and south-west growth centres, the rest of this dwelling increase is to take place in the existing urban area by renewal, redevelopment and infill largely in the form of medium- and high-density housing around centres and along major transport corridors joining them. Transport is understandably concerned with improving the movement of freight into, around and out of Sydney and has important proposals such as dedicated freight rail links to accomplish this. But it also complements the pattern of centres and corridors by connecting them either through existing rail links or new strategic bus services. The net result is that much more of the residential population should be well located to access jobs and urban services.

The final section on implementation and governance, and is concerned with - the planning, programming and provision of the infrastructure needed to implement the strategy; identification and building of major projects and public works; public-private partnerships; pricing of public goods and services; subregional planning to allocate the targets for population, dwellings and jobs; standard Local Environment Plan template; monitoring and adaptation of the strategy.

The Metropolitan Strategy shapes the spatial form and structure of Sydney in 2031 to enhance economic performance and innovation. However, the Strategy is basically an arrangement of land uses and communications and in the absence of an economic development strategy depends on a number of new initiatives and augmentation of existing activities to fulfill its intention, some of which have happened. It promises an Innovation Strategy, a State Infrastructure Strategy and many new institutional arrangements to develop supportive measures, critical strategic detail and monitor trends and progress, some which have eventuated. It is essentially a top-down strategy with local councils as instruments of implementation rather than partners in local place management.

The New South Wales State Infrastructure Strategy 2006/7 to 2015/16

Soon after Morris Iemma succeeded Bob Carr as Premier of New South Wales new mechanisms were put in place to "provide for identification of infrastructure needs, establish clear administration and coordination across government, and

provide for monitoring and management of risks” (Ministerial Memorandum M2005-09 dated 11 October 2005). These new arrangements were firmly seated in the Premier’s Department and Treasury. An Office of Infrastructure Management was set up within Treasury and made responsible for a State Infrastructure Strategy - foreshadowed in *City of Cities* - to replace the arrangements for infrastructure planning and construction existing previously. It assumes new roles and relationships including “linking the four year Budget cycles and our 25 year regional plans, the first of which – the Sydney Metropolitan Strategy – was launched last December” (p. 3).

The Strategy was released in the first half of 2006 and is a much improved exercise compared with its predecessor, providing a ten-year perspective chartering the infrastructure provision the state government will need to make in the six broad regions comprising the state. It contains extracts from the NSW Budget Paper 4 for 2006-07 showing how various programs such as asset maintenance for the following four years fit in with the Strategy (p.9).

The Strategy links “agency asset acquisition strategies with whole-of-Government activities such as the Sydney Metropolitan Strategy and the State Budget” (p. 14) and the Sydney part of the Regional Infrastructure section is introduced by reference to *City of Cities* as “a detailed planning framework to deliver strong and sustainable growth and secure Sydney’s status as Australia’s gateway to the world” (p. 53). So the State Infrastructure Strategy will help transform Sydney into a city with - a strong global economic corridor; more jobs in Western Sydney; connected major centres; a contained urban footprint; stronger centres; access to housing, jobs, services and open space; and stronger connections to the Central Coast, Illawarra and the Lower Hunter.

This section uses the Metropolitan Strategy map with its various kinds of centres, and major lines of communication as a base map on which to locate and annotate the major projects and programs comprising the Infrastructure Strategy. There are separate maps to show the development of the north west and south west growth centres.

The State Strategic Plan – A New Direction for New South Wales

A draft State Plan was released for consultation and comment in August 2006. In the foreword, the Director General of the Premier’s Department commented that “the Premier challenged us to be creative and innovative in policy making”. It was drafted by chief executives working together over a three day period. It defined four themes - respect and responsibility; improving services; growing prosperity across NSW; and environment for living. Within these it identified 13 topics and developed 29 priorities to address them.

A period of feedback and consultation then took place and a much fuller and expanded plan issued on 14th November 2006. The report on public response to the draft Plan identified key concerns with the environment and the provision of infrastructure, and the areas where improvements were most clearly needed were public transport and water. Of the priorities listed in the draft Plan, five were identified as the most important - health services; public transport; reduction in crime; more harmonious communities through increased

participation; and cleaner air. There was also concern as to whether and how the Plan might be implemented.

In the revised Plan there was some minor rewording of the themes and a fifth was added – fairness and opportunity. Within these themes, 14 goals were described, and some 50 targets identified. Those which relate to the Sydney were an increase in the share of trips made to and from the Sydney CBD by public transport to 75% by 2016; an increase in the journeys to work in the Sydney metropolitan region by public transport to 25% by 2016; to consistently meet public transport reliability targets for all forms of public transport; an increase in the number of people who live within 30 minutes travel of a major centre by public transport in metropolitan Sydney; ensuring a supply of land and mix of housing that meets demand (as a target to achieve the goal of 'affordable housing'); and to maintain current travel speeds on Sydney's major road corridors despite increase in traffic volumes.

Like South Australia, the new Plan allocated responsibilities to a Lead Minister and Lead CEO of nominated departments for each priority. Annual Performance Reviews are to be conducted, verified as to their accuracy by the NSW Auditor-General. There is to be an annual report on the State Plan and a review of it in 2009 with full community participation.

The Plan incorporates parts of the Metropolitan Strategy, particularly under the theme 'Environment for Living'. Chapter 8 – 'Delivering locally' – has 22 pages outlining "specific regional delivery plans" for each of nine regions of NSW. That for Western and South Western Sydney repeats and adds to the statements of *City of Cities*. But, strangely there is no section on the rest of Sydney.

Comment on the relationships between the planning documents

Like South Australia, there does seem to be a 'first in, best dressed' character about the three documents under examination. *City of Cities* was the first of the strategic initiatives put in place and is the responsibility of a forceful if controversial minister. It also foreshadowed and indicated some of the elements which were later initiated under the auspices of the lemma government. It was by default part of an economic strategy which did not exist, picked up later by the Innovation Strategy, foreshadowed in *City of Cities*. The Metropolitan Strategy also presaged and pressed for the State Infrastructure Strategy which later emerged with strong links with it. The State Strategic Plan has few connections, however and its effectiveness is still on trial.

While *City of Cities* may have made the running, it is a physical land use and communications plan possessing wide ambitions in addressing social, economic and environmental sustainability. It may find difficulty in holding good in times of increasing uncertainty and rapidly changing circumstances attending metropolitan growth and change.

The crucial issues attending Sydney's future are those regarding the diminishing supply and increasing cost of energy to run homes, businesses and transport. Similar problems attend the management and use of water. It is likely that there will be changes in economic circumstances as part of this shifting urban environment, and it remains to be seen whether the long run of

economic good fortune can continue indefinitely. In this context, there is likely to be much uncertainty, changing challenges and increasing importance in sharing burdens equitably. Infrastructure provision, planning and funding could change remarkably with much more local attention to energy and water supply, use and management. Demand management will become much more important and the large centralised infrastructure systems of previous times become less dominant. Much of the burden will pass on to households who are increasingly bearing the risks of servicing and serving urban areas in the way that governments used to do. The plan set up in *City of Cities* has little capability of satisfying these issues or of adapting to become an important part of the measures devised to address them.

3. Comment on each type of plan

State strategic planning faces the challenge of how well it is formulated and whether it is likely to be followed. On the first point, the two state strategic plans still largely follow the methodology used by establishments and institutions, whether business- or community-based where objectives, aims, responsibilities and actions are reasonably defined, focused and linked. Yet the government role of reconciling conflicting community interests and the practice of collegiate governance is different (Hutchings, 2004). The formulation, sequence and association of Vision-Objectives-Targets in governmental planning are vital and the structure of the plan and its recognition of associations and interrelations are crucial. Once set in a particular mould it can become difficult to recognise and respond to strong but fluid interconnections between issues and policies and the relative importance of each of the elements involved. The plan needs constant revision and monitoring of the kind set up in South Australia demanding a large commitment of resources. There are always questions about the choice, appropriateness and suitability of some of the indicators and benchmarks and how far they cover the necessary ground.

In New South Wales the motives of the state government in formulating the State Plan has been questioned. It was finalised and published in November 2006 under the title 'A New Direction for New South Wales'. The Labor Party theme for the election held in the following March was 'We're heading in the right direction (but we need more time)'. The State Plan was heavily featured in the advertising campaign leading up to the election. The *Sydney Morning Herald* is not enamoured with the lemma Government and is still trying to get over its re-election, and its leading editorial of May 26-27th 2007 complained of "The notorious government-funded campaign by the Premier, Morris lemma to sell his vacuous state plan ...because the plan was egregious nonsense masquerading as serious policy-making". Anne Davies, the Herald's state political editor commented after the election that the Premier's pragmatic approach meant that projects such as the State Plan were bound to founder "by quietly junking the plan or changing the benchmarks" (*Sydney Morning Herald* 2nd April 2007). More obviously, it is also subject to the danger of discard on changes of government, as political differences are more about using different ends to achieve similar aims.

Even where there are regional volumes there is a lack of appreciation of the spatial dimension of the issues covered in the state strategic plans. Such

spatial characteristics are often both determinants and consequences of the problems, issues and opportunities addressed in the Plan. This is particularly the case with concentrations of social difficulty and disadvantage.

The metropolitan strategies deployed in Adelaide and Sydney are quite different in their methodologies, despite the similarity of their aims. Sydney has a crystalline plan, appealing in its simplicity and patterning of land uses and communications in response to the imperatives of propelling economic development and providing certainty for the property development industry. It assumes one population and housing projection for the city to the year 2031, distributes the jobs and residents by sub-region accordingly and constructs a sub-regional planning process to make sure those totals can be accommodated. There is little flexibility in it despite the intentions of monitoring and revision. Physical arrangements are assumed to have decisive authority and effectiveness in bringing about particular outcomes, and where supporting programs and pricing measures are needed to supplement these they are indicated in principle and processes outlined to shape them.

In Adelaide, the contrast could not be more marked. The city is seen as a repository for improved policies in social, economic and environmental terms largely sketched out in the preceding State Strategic Plan and Infrastructure Strategy. The general areas where urban renewal might take place to facilitate this are indicated in principle, and the greenfields areas likely to be developed in the short term are shown. Programming of residential development in the short-term is included.

The infrastructure strategies developed for both states and cities of the past two or three years show marked improvements. They perform an important mediating function between metropolitan strategies and annual budget spending, and both shape new processes for dealing with project development, funding and prioritization. They begin to acknowledge the uncertainties brought about by 'splintering urbanism' (Graham and Marvin, 2001) where infrastructure provision and operation is subject to part-privatisation; regulation by competition and consumer commissions and pricing tribunals; the need to explore sources of funding for public-private partnerships where appropriate and opportune; and new dimensions in the technology of infrastructure and its spatial organisation. To this complex and dynamic scenario, the challenges of climate change have added new dimensions.

Whether these infrastructure planning and project management systems are sufficient to cope with up-and-coming issues is not clear. Both cities face emerging problems in water management and use, energy use and transport. Sydney has replaced its 2004 Water Plan with a more flexible and comprehensive one moving towards recycling and promising 'adaptive management' as circumstances become clearer and the importance of supply-side solutions diminishes. Much the same is likely to happen with transport, as congestion rises in Sydney and the cost of travel increases. This could lead to changing emphases in infrastructure funding.

4. How the plans might evolve

The ambition to chart a transition towards sustainability for Adelaide and Sydney is set in an uncertain future. Cities are now more at risk of energy and water shortages, particularly in the availability of liquid fuels and gas, and sharp increases in price. These in part reproduce the challenge of climate change but also reflect the fact that we are beginning to press on the boundaries of important natural resources. There will be significant and reciprocal relationships with the technological and economic changes that are needed to address these issues.

In these circumstances, the search for certainty as a foundation for long-term planning is problematic, as is the danger of emphasizing state initiatives when many of the necessary responses will be national and international. It is within this context that we conclude with some observations about how the three kinds of planning responses we have reviewed might evolve. The comments also appreciate or assume that they mix abstract policies with funded programs, with shaping of the built environment, and increasing and more intricate communication systems. On a continuum from the abstract to the physical, state strategic plans sit at one end and infrastructure programs and public works projects at the other.

State strategic plans in South Australia and in New South Wales represent a considerable investment. Perhaps the necessary revision and review processes to retain their credibility would benefit from:

- insertion of the policies and programs already in place, by all levels of government that have some influence on the issue addressed – this would fill the gap between objectives and indicators and give some indication of the types and effectiveness of appropriate action;
- include spatial and locational circumstances relevant to the issue or target addressed;
- employ a problem-solving approach to critical questions such as: ‘what limits housing affordability and how can it be improved?’, ‘how do we encourage the development and growth of advanced businesses’, ‘how do we reduce car-dependence?’, ‘how do we provide an education system that can support innovation in business, enrichment in person; and advance community welfare?’, ‘how do we respond to and link the challenges of climate change with better management of natural resources and equity in their distribution?’ This would encourage action in a number of different ways.

Metropolitan strategies might take a mid-course between the ‘envelope’ approach of Adelaide and the design emphasis apparent in Sydney. Policies could be shorter-term than the Sydney proposals but have more substance than in Adelaide. It would be important to identify and concentrate on crucial short-term strategic problems and opportunities. One common to both cities is the movement of freight into, around and within the city and the nodes and corridors involved. Another is the identification, monitoring and support of important

centres, business estates and areas of renewal and redevelopment, with all kinds of programs and support.

One notable aspect of both metropolitan strategies is the importance placed on infill, renewal and redevelopment in the existing urban areas but with little attention or consideration of the processes involved, and their environmental, social and employment prospects and outcomes. Given the importance of this physical change, it is strange that both strategies pay so little attention to this and the demonstrated need to develop programs, policies and institutions that can manage and participate in it (Randolph, 2002). The Sydney Region Outline Plan of 1968 developed a spatial and infrastructure plan to manage suburban expansion, and a similar exercise seems needed to plan change in the existing urban fabric. Powell, in general terms (2006) and in commenting on metropolitan planning in Canberra (2003) has argued that a metropolitan strategy “must be instrumental in giving rise to coordinated land development and infrastructure provision ... (and) ... must provide an administrative or governance basis for dealing with the fiscal implications that follow from such as close-knit arrangement” (Powell, 2003; p. 119). Indeed, such an approach would link urban growth and change with infrastructure programming and projects even more closely, and transfer some of the economic and social ambitions of urban planning to the spatial attentions of an improved state strategic plan. Any whiff of physical determinism would also be avoided.

The infrastructure strategies produced recently in both states are a big improvement on previous exercises and begin to canvas many of the issues arising from ‘splintering urbanism’ (Graham and Marvin, 2001). However that process needs to continue. There are clear indications that infrastructure provision may have to move from the extension of monolithic systems to more flexible and sometimes locally-based structures.

There are two challenges here. One is to develop the right blend of responses to service needs, where infrastructure reflects and supports demand management, stormwater harvesting, recycling of water and waste, local - even domestic - systems of power generation, and sub-regional activity and movement systems. The other is, as Wilmoth points out (2005) to shape new systems of financing these new configurations. While *City of Cities* does sketch out some ideas about the need and funding of infrastructure, these are more clearly articulated in the new infrastructure needed in greenfields growth areas. There is a clear danger, as Wilmoth argues, in not understanding or providing for the infrastructure needed in redeveloping areas. It is too easy to assume existing infrastructure has spare capacity, and while Melbourne has begun to estimate at least the crude costs of expanding activity centres where much intensification and compaction is to take place, (McDougall, 2007) there is still an assumption that existing infrastructure will cope with urban consolidation, densification and the new technologies and processes that are beginning to be deployed to face the challenges of environmental sustainability.

Conclusions

Two other issues arise from the above analysis. One is that in both New South Wales and South Australia, the first of these planning documents has had considerable influence on the others and in each case has been the responsibility of a strong and senior minister. In South Australia it is the Premier that has driven a strong and continuing initiative to link state planning with infrastructure provision. In New South Wales the Planning Minister has overseen a metropolitan strategy that again has been linked with an infrastructure strategy. These differences in emphasis and connection rely on the ministers involved and the timing of each of the three documents. This raises the intriguing issue within state planning, budgeting and development circles of which planning paradigm might lead the state, and which elements of their bureaucracies might undertake and lead it. Given the ephemeral nature of some of these circumstances, it is even more important to establish the most appropriate roles, responsibilities and relationships of each plan.

Footnote:

The holding nature of the 2006 Planning Strategy for Metropolitan Adelaide is demonstrated in the announcement of the preparation of a new strategic plan in June 2008. This will focus on infrastructure development and directing growth along selected transport corridors linked to a \$2 billion investment in public transport (Australian Financial Review, 11th June 2008). This appears to reflect some of the suggestions for future planning outlined in the paper.

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4 A COSMOPOLITAN DEMOCRACY: THE REPOSITIONING OF RECENT AUSTRALIAN METROPOLITAN STRATEGIES?

Abstract: In the period since 2002, metropolitan strategies have been shaped for the five mainland state capital cities of Australia – Sydney, Melbourne, Brisbane, Adelaide and Perth. Despite their currency, recent events suggest that they may have to be radically revised. But at the same time their adaptation in this way could assist Australia in planning for the future.

This paper starts by briefly discussing the distinctive features of Australia which have a powerful influence on the making of Australian plans. That is used as a background to describe and analyse the five current metropolitan strategies. After this appraisal, I review developments that have largely occurred since their formulation in order to make out a case for a revised form and role for the strategies. In doing so, recent ideas and practice in strategic spatial planning in Europe is examined to see if there are any trends or lessons there that may be of relevance. Finally the characteristics of a revised strategic planning process are suggested and the form in which its proposals might be presented.

Spatial strategies for metropolitan areas – an Australian paradigm?

Australian urbanisation has distinctive characteristics. Not surprisingly, the most important are those of governance and the institutions of civic society, and I commence with these.

Governance

Australian settlement proceeded through the founding of largely independent colonies, dominated by the capital cities that in most cases represented the original site of settlement. These colonies became states at the federation of Australia in 1901. Since then the capital cities have grown to increasing dominance of their respective states, particularly in the case of South Australia.

The states are responsible for shaping the development, growth and change of the cities, for the provision of their infrastructure, and the public services of transport, housing, education, health, security, recreation and the arts. Since the Second World War, this concentration of functions has meant that a succession of metropolitan strategies has been focused on the coordination of these services in rapid suburban, low-density development until the latter years

of the twentieth century. The recent crop of metropolitan strategies reflects a change in circumstances and the drive for a more compact city in Australia.

However, federal government policies such as immigration, and resource allocation processes such as the disbursement of funds for roads, public transport, health and education powerfully affect urban conditions (Stilwell and Troy, 2000). Yet with two short-lived exceptions from 1972-1975 and in the early 1990s (Badcock, 1993; Alexander 1994; Orchard, 1999) the federal government has taken no interest in urban affairs. The dysfunctional results of this have been well described by Stilwell and Troy (2000) and Gleeson (2001). The federal government has superior revenue-raising powers to that of state governments, including income tax and there is a miss-match of resources and responsibilities. Consequently the states rely heavily on grants and loans from the federal government for general and specific purposes. In recent years there has been increasing centralisation, and more conditions placed on these disbursements.

Quixotically, this centralisation is repeated in the relations of state and local government. Local government generally does not have the powers and resources of its counterpart in Europe, the United States and the United Kingdom, and it is not mentioned in the Constitution establishing the federation of the Australian colonies in 1901. Local government is established by state legislation and its detailed plans and zoning mechanisms have to be approved by the central authority. In metropolitan strategies there is consequently heavy reliance on land use planning and communications to shape urban conditions, with a consequent danger of physical determinism. There is also a tendency to plan in considerable detail in order to make sure that important elements of metropolitan strategy are cemented at the local level.

Responsibility for infrastructure provision

Because of its responsibility for the provision of a wider range of infrastructure and services, state government plans the release of land for urban development in parallel with the provision and coordination of these functions, and this became a major objective of metropolitan planning during the long boom years following the Second World War. This was particularly the case with the Melbourne plan of 1954 (Melbourne and Metropolitan Board of Works, 1954) and the Sydney Region Outline Plan of 1968 (State Planning Authority of New South Wales, 1968).

However, significant elements of metropolitan infrastructure have been privatised or built by public-private partnerships over the last twenty or so years, under the neo-liberal agenda of national and state governments (Gleeson and Low, 2000). These include electricity infrastructure and energy production in several cities, in addition to water supply and sewerage in Adelaide, rail and trams in Melbourne and some motorways in Sydney and Melbourne. Despite these indications of 'splintering urbanism' (Graham and Marvin, 2004), and acknowledgement of the increased difficulty of ensuring coordination and level of service in such complex arrangements (Office for Infrastructure Development, 2005), there is still a strong state government presence and control over infrastructure (McGuirk, (2005) compared with other western nations. Where privatised, public services are still subject to substantial

regulation and performance standards, although the precise nature of these varies from state to state. Independent Pricing Tribunals, established by the state government, assess the case for price increases in public services.

Relative importance of greenfield and brownfield development

Metropolitan planning in Australia since the Second World War has been dominated by the need to provide for strong economic and population growth with a high level of immigration. This expansion was, until recently, mainly in the form of low-density suburban development. Over the years, planning has been reasonably successful in organising this growth, although there have been lags in the provision of social services and employment in particular, and complaints of isolation particularly in newer suburbs. In the last two or three decades, social economic and cultural changes have taken place, memorably described in Paul Kelly's *The End of Certainty* in 1992. Urban consolidation and the theme of a compact city have become major imperatives in metropolitan planning and are prominent in all metropolitan strategies.

By contrast, in Europe and the United Kingdom, there has been extensive use of brownfields sites, initially in the processes of postwar reconstruction and later in the use of redundant harbour, industrial, commercial and transportation facilities. There has been widespread practice and experience in urban renewal and redevelopment processes, involving extensive changes to residential populations. While current Australian metropolitan strategies mark a dramatic change in emphasis from the development of greenfields to brownfields locations, it does seem that many of the measures used successfully in the planning of greenfields development are being applied to existing built-up areas. Thus the Growth Centres Commission in Sydney has quite detailed transit-oriented plans and sophisticated zoning measures to organise development in its new north-west and south-west growth sectors in greenfields. While not quite to this level of detail yet, planning proposals in the existing built up area are quite exhaustive and comprehensive, and for important centres and corridors, suites of plans have been formulated to shape development through to the year 2031. The infrastructure needs to accommodate these larger residential and employed populations remain largely uncharted, and the necessary contributions sought from developers remain controversial and ambiguous.

Use of centres

Compared with European and United States planning practice, metropolitan plans in Australia make intensive use of centres as fulcrums to focus and articulate growth and change as noted by Sipe and Gleeson (2004). While their use as planning instruments have varied in force and character over the years, in current plans nominated centres form a dense network and their connection by public transport and other main lines of communication is seen as a major influence in promoting and articulating a denser city.

While centres are used as strategic initiatives in Europe and the United States, their deployment is much more selective, shorter-term in general and often supported by a wide range of development incentives and initiatives.

The drive for investment and the property industry

As state government documents, metropolitan strategies are seen as a vehicle for competing with other capital cities in a globalising world (Hamnett, 2000). They aim to attract investment capital in competition with other cities, and sometimes offer inducements to do so.

The property industry in Australia is organized in a distinctive way. As Burke (1999) and Gleeson and Coiacetto (2007) point out there is a separation of the land development industry from the building activity. Land developers acquire land, consolidate it, obtain or wait for the necessary zoning and then subdivide it along with any required payment or provision for infrastructure that they may have to make. It is then sold on to builders and households for dwelling construction. As Burke points out, in most other countries there is a generally integrated development/building process where the profits are derived from the sale of the end-product, the dwelling.

In New South Wales there is little government intervention in the development or renewal process. Zoning of land and development control provide a framework in which the government ensures there is infrastructure provision. The system of valuation and levying of rates on the unimproved capital value of land is meant to then propel the land to its highest and best use. As already noted, this has been reasonably effective in greenfields development. The state government has only become involved in the renewal process where it forms corporations to redevelop areas with large state land holdings.

Summary

A general conclusion must be that something like an Australian paradigm of planning reflects the distinctive characteristics outlined above. It might be summarised in terms of:

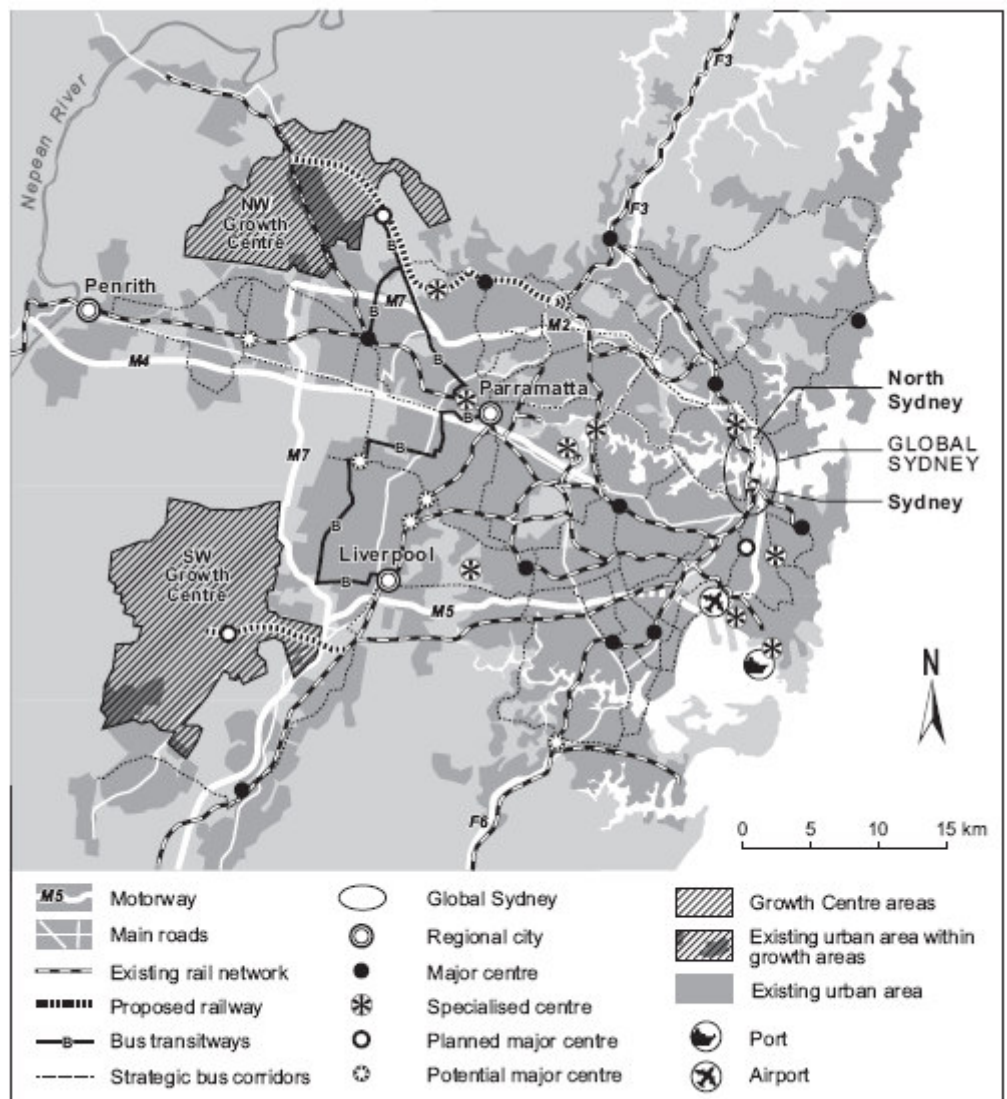
- long-range planning a generation ahead;
- considerable detail as to the arrangement of activities, land uses and communications;
- designed as a coordinating instrument for infrastructure development;
- reliance mainly on private investment and the market to flesh out the strategy;
- based on state legislation about environmental planning that marries strategic purposes with local control.

Current Australian metropolitan strategies

Sydney

City of Cities (Department of Planning, NSW, 2005) takes a familiar form, with detailed arrangements and connections of major centres, land uses and principal lines of communication as Figure 1 shows. It relies on one population projection for the metropolitan area for the year 2031 and calculates that 640,000 new homes will be needed to house that population. The required number of new dwellings is allocated to 11 sub-regions, as is the number of jobs. The local governments in each sub-region can negotiate about their share of the sub-region's total, but together are expected to satisfy those targets.

Figure 1. Main Elements of the Sydney Metropolitan Strategy 2005
(adapted from NSW Department of Planning 2005, pp. 10-11)



Local government plans, ordinances and strategies are to be re-aligned to accommodate the range and magnitude of activities expected at the end of the plan period. There are other proposals to help implementation, such as the state budget program and an 'Innovation Strategy' to attract advanced businesses to major strategic centres – 'Global Sydney', Parramatta, Liverpool and Penrith.

For the greenfields growth sectors in the north-west and south-west of Sydney, transit-oriented development is planned involving a centres hierarchy, permeable street patterns and residential densities graduated according to access to public transport and centres. The same detail attends important redevelopment locations. For example, Liverpool, one of the important regional cities has four draft plans: a city centre vision, a development control plan, a civic improvement plan and a local environment plan. Similar detailed plans have been drawn up for parts of the Parramatta Road corridor joining Parramatta with central Sydney, and other similar locations.

Market activity is expected to develop the city in accordance with the plan. In supporting the need for a new metropolitan plan in the early years of the twenty-first century, the Property Council of Australia, an important coalition of property interests provided many proposals and targets for population and employment growth in nominated centres that became part of the metropolitan strategy *City of Cities* (Property Council of Australia 2002, 2004, Bunker 2007a). This detail and apparent certainty was seen as essential to attract investment to Sydney, already suffering from a decline in housing affordability and experiencing a net loss in interstate migration in nearly every year. Somewhat ironically the Property Council has recently complained that renewal, infill and redevelopment of the scale envisaged in the existing built up areas are proving very difficult.

Melbourne

Melbourne 2030 (Department of Infrastructure, 2002) appeared before *City of Cities* and has many similarities with some differences in research background and proposals (Bunker and Searle, 2007). There was also more consultation in the preparation of the plan than was the case with Sydney. Like Sydney, one summary map contained the main proposals in similar form.

It was estimated that 620,000 new dwellings would be needed by 2030 and this increase was allocated to five sub-regions making up the metropolitan area. There is a strong use of activity centres as an instrument of planning and focus of intensified development. *Melbourne 2030* makes extensive and comprehensive use of them based on a wide-ranging and detailed consultant's review (McNabb et al, 2001).

There is a pronounced switch in emphasis from greenfields development to infill and renewal in the existing urban area means. Whereas 38 per cent of dwelling starts in the period 1996/7 to 2000/1 were on greenfields sites, this proportion was expected to drop to 31 per cent in the period 2001-2030. The corresponding proportions for major redevelopment sites (which are mainly major activity centres) were 24 per cent and 42 per cent respectively. The remaining proportions were in dispersed urban and non-urban development (within existing outlying suburban areas with a small amount of development in

and around small townships) at 38 per cent and 28 per cent in the two periods mentioned.

The first five-yearly audit of Melbourne 2030 has been started. It cannot consider fundamental changes as the view is that Melbourne 2030 is a 30 year strategy that should run its course.

Brisbane

This plan covers the greater Brisbane region and is called the *South East Queensland Regional Plan, 2005-2026* (Office of Urban Management, 2005). It echoes many of the themes and proposals of the Sydney and Melbourne strategies, but in a generally less prescriptive form. It covers the City of Brisbane and 17 surrounding local governments including the cities of Toowoomba, Ipswich, Gold Coast, Logan and Redcliffe. The City of Brisbane is the largest municipality in Australia, with almost exactly a million people at the June 2006 Census, and exercises a comprehensive range of functions. Accordingly the preparation of the plan involved close and evolving consultations between the state government, the City of Brisbane, other local governments and regional organisations. This resulted in a long gestation and there is a more generalised form to the proposals.

The strategy does not have one single map consolidating its key proposals but a series of maps about different features such as activity centres which “are intended to represent general concepts for the purpose of broad-scale regional planning” (Office of Urban Management, 2005). Regarding population growth, the plan uses methods similar to that of Sydney and Melbourne. The plan period, however, is shorter (to 2026), and the four sub-regional population totals at 2016 and 2026 are called ‘indicative’. The plan then contains some ambiguous language about population growth and distribution. While a table contains detailed figures about the location of new dwellings by local government area, these figures are not to be seen as targets but reflect ‘anticipated total requirements’. However, they are then referred to as targets and “local government is encouraged to exceed these minimum numbers”.

Like Melbourne and Sydney, a system of activity centres is defined and located. They are similarly seen as crucial elements in the transit-oriented development of higher densities and mixed uses brought about by the infill and renewal processes which are expected to become dominant by 2026. There is less analysis and prescription concerning them than in the Sydney and Melbourne strategies.

Adelaide

The present planning strategy (Government of South Australia, 2006) is caught between a new State Strategic Plan and a State Infrastructure Strategy, both driven by the Premier and Cabinet (Bunker 2007b). It reflects a diminution in power by the state planning department which has been relegated to a part of the Department of Primary Industries and Resources. The strategy is placed to reflect the State Strategic Plan’s ambitions to help achieve a population growth

to 2 million by 2030 for the state. It aims to make Adelaide a pleasant, attractive and rewarding place in which to live and work.

Thus its proposals are summarised in an 'Adelaide Metropolitan Spatial Framework' which is to be read "as a conceptual representation of some of the directions of the Planning Strategy and must be read in conjunction with the other maps and the relevant sections of the strategy" (Government of South Australia, 2006: 26). It offers "a conceptual framework that has been designed to reflect the existing urban structure and identify the common land-use patterns that will accommodate a range of population projections, and the possible resultant housing, employment and service needs" (p.25).

The strategy is best seen as a holding operation while these new planning initiatives are played out. No targets are set for population and urban growth in the strategy, but the well-established Residential Development Program continues its detailed short-term forecasts of future dwelling growth by region and type.

Accordingly, the present institutional circumstances in South Australia have resulted in a hybrid metropolitan strategy with conceptual and schematic statements about the long-term combined with reasonable certainties about short-term growth especially in residential development. The Infrastructure Strategy provides the certainty needed to attract business enterprises and property investment and acts as a framework for the state annual budget spending on capital works.

Perth

Perth's 'Network City' (WAPC and Dept. of Planning and Infrastructure, 2004) is a strategy much more oriented to process than any of the others. It claims to be "the foundation for active policy and plan making, not a blueprint or a master plan simply to be carried out" (Government of Western Australia and WAPC 2006: item 6.3).

This planning process drew on two main sources. The first was an extensive exercise in public involvement called *Dialogue with the City* (Government of Western Australia, n.d.). This involved a number of events culminating in a large interactive forum of 1100 participants in September 2003, with over a hundred of these continuing to refine and focus the information emerging from the forum. The other major input came from work which developed an institutional model to achieve desired outcomes for integrated land use and transport (Curtis and James, 2004). This was applied to Perth to stimulate more sustainable travel by the integration of land use and transport networks within both new and established areas (Curtis, 2006). The key elements in these connections are centres, activity corridors and transport corridors.

In September 2004 the community planning strategy for Perth and Peel was released for public comment (WAPC and Dept. of Planning and Infrastructure), mentioning the strategy had already been endorsed in principle by the government and the Western Australian Planning Commission. In response to the submissions received, a summary report was issued in November 2005 (Government of Western Australia and WAPC) called 'Network City – a

milestone in metropolitan planning'. Finally, in March 2006, a draft Statement of Planning Policy called 'Network City' was released (Government of Western Australia and WAPC).

The Western Australian Planning Commission is a powerful body whose powers and responsibilities link strategic decision-making about Perth's future with local government in a continuing dialogue. It is charged with the process of implementing the first stages of the plan. Its spatial form is shown in a generalised 'Network City Framework', a heavily annotated map showing activity centres, networks, community strength and potential, and rural and resource areas and non-development areas. A one-page 'Network City Action Plan' outlines the actions required including the spatial plan and strategy.

The Commission has identified nine priority tasks (Government of Western Australia and WAPC, 2006) in developing the plan in detail. They include detailing the metropolitan structure; determining local population, housing and job targets by constructing appropriate methodologies collaboratively; and developing the activity centres, activity corridors and transport corridors. The tasks will be driven by key WAPC committees, regional centre (p. 11), and between the Minister for Planning and Infrastructure and the mayors and CEOs of Bassendean, Bayswater and Swan to signify their commitment to the Maylands-Guildford Activity Corridor Project (p.12).

Summary

It would seem that each strategy is a palimpsest with distinctive Australian circumstances outlined in this paper, overlaid by more contemporary developments. In particular the status of the strategies as state government documents gives each a unique character reflecting the political culture; roles, responsibilities and relationships of governance; and the sources of finance for public purposes in each state.

However, these more recent paradigm shifts have striking differences in emphasis. In Sydney and Melbourne there is a strong reversion to modernist approaches to planning where land uses, communications and urban conditions are comprehensively arranged a generation into the future to achieve certain objectives: in the case of Sydney to enhance economic competition and investment.

In South East Queensland, local governments and regional groups have been closely involved in the long process of plan formation and this and the relative strength of Brisbane City Council vis-à-vis the state government may explain why the strategy is somewhat less prescriptive than is the case with Sydney and Melbourne. The strategy still has many of the features of those other plans, but there is more flexibility, and tellingly there is no one composite plan to present a blueprint for the future.

Adelaide similarly has a 'spatial framework' which is generalised and annotated with statements of intent. The strategy is intended to represent how the city might reflect and contribute to the State Strategic Plan over the next ten to fifteen years. There are no targets set for employment or population distribution

beyond the short-term estimates of the Metropolitan Residential Development Program.

While it can be concluded that the metropolitan strategy may be in part a holding operation, it does contain principles about managing water, air, energy, waste, flora, fauna and landscape which will be of increasing importance in metropolitan strategies. It is more capable of dealing with future uncertainties, though lacking precision in some important aspects.

Perth has a unique approach, reliant on a public involvement process for ideas and issues, on a sophisticated modeling of land use and transport, and on utilisation of the instruments of governance to shape and implement the plan. It is dominated by the culture of the state government and its instrumentalities. However the continuing development of 'Network City' could well incorporate more interests and issues and addresses the uncertainties that are beginning to arise concerning Australia's cities. It has that flexibility.

New emerging trends

Two groups of influences have emerged in the last two or three years affecting the future of Australia's cities. The first is the increasing realisation of how many Australian cities depend on natural resources in the form of water, the sources from which energy is drawn, and the fuel used in movement of people and goods by private vehicle. Overarching these concerns is the issue of climate change, with increasing evidence that Australia is likely to be affected considerably in this process. Public awareness of these challenges and a desire to confront them has increased markedly in Australia in recent years in the face of droughts, severe weather events, shortage of water for the cities, an unusual series of hot summers, and rising fuel prices. Although these challenges are beginning to be appreciated and addressed, there has been little engagement on the part of the metropolitan strategies with these issues.

For example, *City of Cities* includes the Metropolitan Water Plan (Department of Infrastructure, Planning and Natural Resources, 2004) meant to guarantee Sydney's water supply over the next 25 years, as part of its sustainability credentials. However, poor rainfall and a crisis in the low levels of water storage in the supply dams (which badly affected all Australian cities) meant it was replaced in eighteen months by a new Water Plan (Government of New South Wales, 2006). This time it was published by the state government and was four times the length of its short-lived predecessor. It shaped an expanded suite of policy measures to address water management and use, beginning to emphasise demand management and recycling of water much more than previous policies. Shorter-term measures included the construction of a dam in the Hunter Valley and the building of a desalination plant if water levels fell below critical levels (since commenced). It also commissioned a research program involving the Commonwealth Scientific and Research Organisation (CSIRO) and the University of New South Wales to determine if there are secular changes in rainfall amounts and patterns and of what magnitude they might be. A flexible program of 'adaptive management' is to be developed as information-gathering continues and various policy options are considered. The head of the Department of Planning in New South Wales somewhat ruefully

conceded that the metropolitan strategy should have taken more account of the urban impacts of climate change (Munro 2007).

The second major shift is occurring in some of the major features of governance in the federal system. This has been largely brought about by a change in the federal government in November 2007. Three important initiatives since it took government show a shift to a more transactional style of government, forging relationships and understandings with other parties. These are signing the Kyoto Protocol, leaving the United States as the only country in the developed world refusing to do so; an apology to the Aboriginal community for the injustices done to its people, particularly the 'stolen generation' of children; and the determination to rebuild federal-states relationships by redressing the imbalances between resources and responsibilities.

Significantly the new government has argued for new structures and styles of governance. It held a summit of 1000 delegates in Canberra in April 2008 to provide ideas for a long-term plan for Australia. While criticised as a *talkfest*, the main message that came from the conference was for a radical rethink of the federal system.

Summary

These two sets of new circumstances will inevitably involve the federal government, the states and the broader community in discussions and action about climate change; more effectively handling water management and energy production and use; reducing car-dependence; and ensuring that these adjustments take place in an equitable manner. This will entail flexible and learning responses and national and international agreements (using the external powers of the Commonwealth to enforce their provisions on the states) in which metropolitan strategies could play a large part.

Lessons from Europe?

Vision

The German philosopher and sociologist, Ulrich Beck, in his writings on reflexive modernization, the risk society and a cosmopolitan democracy has had a remarkable influence in arguing about the kind of society and governance that we should be aspiring to. His influence has permeated sociology (Urry, 2004) and environmental sociology (Buttall, 2000). Its potential impact on spatial planning, notably in relation to Australian practice has been forcefully argued (Gleeson, 2000).

The key concept of reflexive modernisation as developed by Beck is to reinvent the radical visions of the Enlightenment through a dynamic engagement of the institutions of society with those political and ethical ideals. Beck argues this process is reflexive modernisation: it is not the overtaking of modernity by post-modernism. "Radical social change has always been part of modernity. What is new is that modernity has begun to modernize its own foundations" Beck and Willms, 2004; p. 29). These foundations included the nation-state; identities

anchored in large collective groups; 'normal people' defined as those participating in paid labour; a separation of nature and society; and technical rationality assuming that the side-effects of industrialization were predictable and controllable (Beck and Willms, 2004: p.30). Thus the difference between the first and second modernity would be the dissolution of its own foundations and to resist this would be counter-modernisation.

In more recent years and stimulated by the development and enlargement of the European Union, Beck has advanced these ideas into the concept of cosmopolitan democracy where he reasserts the Enlightenment concept of cosmopolitanism – “the recognition of multiplicity” (Beck and Willms, 2004: 183). It involves a change to the nation-state which becomes a microcosm of world society, not only in the nation, but the region, the locality and the metropolitan centres. In doing this, space is confirmed but in fluid and dynamic dimensions, space bound realms interweaving with and conditioned by flows and currents of people, capital, ideas, information and goods.

These concepts are translated into resulting state strategies (Beck, 2005: pp. 166-235). Some are aimed at 'despatializing' the state; at reducing competition between states by policies of trans-nationalisation; at solving global problems globally; at shedding the 'innocence of the nation-state'. The source of power is a cosmopolitan democracy, recognizing the worth and difference of the individual in the institutions and policies of the state. By making diversity possible, creativity is released. Beck pulls the threads of his argument together:

Cosmopolitan Europe is the institutionalized self-criticism of the European path. The process is incomplete; indeed it cannot be completed. Moreover it has just begun, with the sequence, Enlightenment, post modernity, cosmopolitan modernity ... Hence it is the Europe of reflexive modernization in which the principles, boundaries and guiding ideas of national politics and society are up for discussion

(Beck, 2006: 171).

Some principles and processes of spatial planning

This evolution of the European Union has been one factor in developing new ideas about strategic spatial planning in Europe (Healey, 2004). For example Richardson and Jensen (2003) construct a “theoretical and analytical framework for the discourse analysis of socio-spatial relations” in order to understand the “new set of spatial practices which shape European space at the same time as it creates a new system of meaning about that space based on the language and ideas of polycentricity and hypermobility” (Richardson and Jensen 2003: 7).

Other writers in this vein include Madanipour et al (2001), Albrecht et al (2003), Salet et al (2003), Healey (2004, 2006, 2007), Harding (2007), and Neuman (2007). Hillier (2007) develops a multiplanar theory whose distinctive properties emphasise multiple small narratives - “a focus on parts while still trying to see a constantly changing impossible ‘whole’”, where space is not a hierarchy ranging from the local to the global but “a rhizome of multiple connectivities” (Hillier, 2007:12) in a process of creative experimentation in space. This dynamic

complexity is essential to the “understanding and working with contingencies of place, time and actant behaviours” (Hillier, 2007:319).

Healey (2004, 2006, 2007) deals more with the spatial planning of large cities while still using a similar “‘relational planning’ situated within the complex socio-spatial interactions through which life in urban areas is experienced” (2007: 11). This does not emphasise Euclidean space so much as action spaces constituted by a “complex layering of multiple social relations each with its own space-time dynamics and scalar reach” (2007:224). In *Urban Complexity and Spatial Strategies* (2007) she develops this theme in an exhaustive analysis of planning for the Cambridge region, Amsterdam and Milan. These case studies, often over long periods of time show the changing importance of issues, the shifting and different spatial realms where decisions are made affecting the city, and the interests/groups/actors which become involved and in what way. However given that “you cannot have an interminable process of civic engagement without producing something” (Friedman 2004: 65), each city provided important planning statements at critical times: in Healey’s words “the work of strategy formation becomes an effort to create a nodal force in the ongoing flow of relational complexity” (2007: 228).

Each of these planning statements involves the construction of a particular process and methodology. While these vary with the circumstances of each city, one generic approach has been that of strategic choice (Friend and Jessop, 1977; Friend and Hickling 2005). Its distinctive characteristics are in the shaping, framing and taking of crucial actions in a collaborative learning process. In doing this, participants shape the dominant decisions to address a particular issue after analysing their connections and consequences. Often these decisions required clarification and the process identifies and explores the different kinds of uncertainty surrounding them. A special issue of *Planning Theory* in November 2004 (Volume 3 (3)) was devoted to discussing it.

This kind of spatial planning encompasses complex negotiations between those who wish to join and leave the dialogue, and those with responsibility for taking decisions about their city. They are much affected by the drive to achieve success in the organisation of global capital and labour. The action space is abstract, but qualified by location, spatial relationships and urban conditions. The metropolitan strategies that result have a more fluid and generalised structure and are shorter term and more indicative than the previous modernist plans. They are supported by other plans, proposals and positions.

Spatial planning practice

How have these new ideas and imperatives been represented in practice? I first look at the spatial strategy for Europe, before moving on to look at those of some of the cities.

The European Spatial Development Perspective (Committee for Spatial Development, 1999) provides a framework “towards balanced and sustainable development of the territory of the European Union”. It was ten years in the making and as its name suggests, is not a plan but a series of principles. It does not contain any policy maps, as space is treated as an abstract concept which while covering defined units of territory, deals with the relationships and

flows which result from the spatial impacts of the policies hammered out by the member states. It does not have any legally-binding status but acts as a framework for negotiation about current and emerging issues where space is both a consequence and a determinant of the characteristics of those phenomena.

Hillier comments approvingly on its provisions and processes identifying the ten-year process in its gestation as important in establishing the understandings, emphases and relationships of the matters addressed and in building the networks needed to progress action concerning them. It challenges “traditional Euclidean geographies of space as a container for places and events, of distance and time; to linear notions of development pathways in time and essence; and to command-control methods of governance (Hillier, 2006; pp. 277-278) replacing it with “a creative opportunity for networking, communication and negotiation; for flexibility and fluidity across space and time contingent on context” (Hillier, 2006: p. 283).

The Spatial Perspective, however is meant to outline a spatial framework within which the so-called ‘Leipzig Principles’ of economic, social and environmental sustainability can be shaped and committed. As always, opinions are divided on how effectively it does this. Jensen and Richardson (2004) for example argue that economic considerations are dominant but other observers have also noted that its attempt to balance development, with support for more remote, impoverished and disadvantaged territories runs contrary to the aggressive strategies of many large cities intent on improving their competitiveness in the world and European economies (Salet et al 2003). Similarly the European Spatial Development Perspective stresses the need for collaboration and cooperation between cities and cities, and cities and regions, when these themes are not strong features of current metropolitan strategies.

I now turn to examples of spatial planning in Europe, and draw on the work of Albrechts (2004, 2006) who has both tried to define the principles of new spatial planning and examined a number of city plans to see how far they might resonate with those themes. Central to his argument is the association of land use policy with a number of policy instruments to provide a spatial framework for the shaping of social, economic and environmental conditions. In Albrecht’s terms:

a more coherent and coordinated long-term spatial logic for land use regulation, for resource protection, for action-orientation, for a more open multilevel type of governance, for introducing sustainability, and for investments in regeneration and infrastructure

(Albrechts, 2006: 1153).

Albrechts then establishes what he regards as the key characteristics of normative spatial strategic planning. These are selectivity; relational-inclusive (more relational concepts of space and place and focusing on relationships and processes); integrative; visioning and action-oriented. He then applies these characteristics as criteria in judging how far nine recent plans reflect these qualities. Most, but not all are of large city size and include Perth in Australia. He concludes that while most of them “demonstrate a shift from traditional technocratic statutory planning (away from regulation of land use)

towards a more collaborative and (albeit selective) actor-based approach” (Albrechts, 2006: 1166) they still had a long way to go. Judicious selectivity is a particular failing, and in only three cases does the level of government equate with the planning level.

Repositioning metropolitan strategies in Australia

Gleeson and his colleagues carried out a socio-theoretic review of then Australian metropolitan strategies in 2004 (Gleeson et al, 2004). In doing so they used five investigative themes – policy, space, governance, finance and democracy. As can be seen these themes have proved robust in this present discussion and remain valid in appraising the four strategies that have been produced since their review.

Current metropolitan strategies in Australia reflect traditional modes of planning largely concerned with the built environment and arrangements of land uses and communications in comprehensive patterns far into the future. I have argued that this in part reflects an Australian paradigm. This paradigm is strongly confirmed in the current strategies for Sydney and Melbourne. On the other hand the strategies for Adelaide and Perth, while still reflecting much of this paradigm, rely more on process and start to take on some of the ideas and principles beginning to affect European practice. They do this for different reasons and this will be explored further below.

However, in some ways metropolitan planning in this traditional vein has acted as a default mechanism for addressing urban issues and charting the future of Australia's great cities. There are signs that strategic spatial planning can constructively adapt to the new challenges and opportunities emerging. I address three of the most important factors in this repositioning.

Changing challenges and context

The new emerging trends discussed previously will powerfully affect Australia's cities. For the first time the environmental impacts of city growth stretch beyond the immediate and local effects in terms of water and air quality, biodiversity and land use change, to more adequate management of natural resources on a national and international scale. This will involve some major changes to the way the cities work.

At the same time the federal system of governance looks likely to undergo fundamental change which will reflect relationships and process, selectivity and collaboration. A new federal government seeks to drive this process with the avowed purpose of combining “the self-regarding values of security, liberty and property ... (with) ...the other-regarding values of equity, solidarity and sustainability” (Rudd, 2006: p. 50).

The dimensions of planning strategies

In all states in Australia there have been recent planning statements in the form of state strategic plans. These aim to chart a future for each state in terms of aims, policies and indicators of progress or performance, usually in the form of a nested hierarchy. These have varied in their quality and form. At the worst they have been accused of providing a broad policy platform for the particular government in power and useful in this regard at times of state election.

However, in South Australia which has a reputation for innovation and purpose in governance, the latest State Strategic Plan (Government of South Australia, 2004, 2007) has been strongly endorsed by the Premier and Cabinet, and has been driven relentlessly through the machinery of governance and public administration. Accompanying it is an Infrastructure Strategy (Office for Infrastructure Development, 2005) with which it is interlocked. The Metropolitan Strategy has been squeezed between these two plans, whose proposals together pre-empt or appropriate many of the previous concerns of metropolitan planning.

However, these three instruments – the state plan, the metropolitan strategy and the infrastructure program potentially offer a way of sorting through the intermixture of social, economic and environmental issues, shaped in part by spatial configurations and urban conditions. They offer a potential framework within which to embed decisions, policies and resource commitments arising from a process more multi-scalar, flexible and relational than present documents provide.

To do this, their roles and relationships need to be better shaped and connected (Bunker, 2007b). State plans need spatial and urban considerations built into them. Metropolitan strategies need to concentrate on improving the processes accompanying the compact city theme, particularly in better analysis and guidance of the renewal and intensification processes as well as on the social consequences of this change (Randolph, 2002; Bunker, Holloway and Randolph, 2005). Infrastructure strategies need to consider further the technologies and systems used in water management and use; waste management; and energy production and use. This could redirect spending from the traditional extension of monolithic systems. They also need to identify much better the infrastructure needs of areas undergoing renewal and intensification of activity. The final commitment is the state budget from year to year both in its infrastructure spending and in the operation of urban services of all kinds.

Representation of metropolitan strategies

Metropolitan strategies rely heavily on maps and supporting text showing the distribution of the characteristics they are planning on the ground. When this is done on one map, as in Figure 1, comprehensively dealing with all centres, all major land uses, all concentrations of activity, and all communications far into the future, it adopts the conventions of detailed planning of estates and small areas. Inevitably it is called a blueprint. Graphics of this kind have a powerful visual impact and an expectation that the plan is to be delivered like that. This convention is most misleading given the dynamics, complexities and

uncertainties attending large cities. The transport arrangements, which were always the weakest feature of *City Of Cities* have already been undermined (2008) by the announcement of a completely new metro-style line which removes much of the credibility of the major public transport arrangements proposed only three years before. On the other hand the absence of any policy maps in the European Spatial Perspective - because of the controversies likely to attend their production - reduces its effectiveness. It is possible, of course that the Perspective could provide a foundation upon which maps will later be developed.

An interesting course in this regard has been provided in the current Brisbane and Adelaide strategies. As already noted the Adelaide strategy contains a 'Metropolitan Spatial Framework' supported by a number of other maps dealing with particular circumstances, proposals or issues. Brisbane does not have a composite map but again a series of maps showing important characteristics of the strategy. Perth has a nominal and generalised map annotating the main ambitions of the planning process

The future representation of a metropolitan strategy might reflect its character as a process and an evolving framework. It could be represented graphically and cartographically by a series of dynamic maps, graphs and figures. The maps, for example could form a series of layers building up the characteristics of the city. These maps could be reshaped as conditions, issues and policies change. They could be supported and integrated with text assembled in a loose-leaf form under appropriate headings. Significant decisions, commitments and policies could be explained and depicted by these combined forms of communication.

Conclusion

Australia's metropolitan strategies are grounded in an Australian paradigm. They are state government documents aiming to shape the physical form and structure of the city far into the future so that it achieves social, economic and environmental purposes. There is a danger of physical determinism in this, but a number of factors make it likely that they could serve as a foundation for more effective and comprehensive planning.

These factors include new challenges facing the cities in more effectively managing and using the natural resources of different kinds upon which they depend. There is much more likelihood of federal government involvement in facing these and other issues, employing a more collaborative approach. New planning approaches in the form of state strategic plans and infrastructure strategies offer the potential for a more comprehensive and integrated methodology in guiding urban growth and change.

These changing circumstances suggest a more selective and truly strategic planning process can be devised for Australian cities. Reducing car-dependence; improving housing affordability; reducing greenhouse gas emissions; minimising waste; improving access to jobs, education and services; stimulating economic activity and reducing social disadvantage are problems requiring a combination of measures and are not subject to single solutions.

Such strategic processes are more akin to the ideas and practices currently under discussion and development in Europe. The present metropolitan strategies in Australia offer a basis from which to move towards them. Even the modernist strategies of Sydney and Melbourne can be adapted (Bunker and Searle, 2007), while Perth and Adelaide have more promise in this regard. The outcome could be a cosmopolitan democracy reflecting something of a paradigm shift.

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