

Public transport: funding growth in urban route services (Australia)

Transporte Público: el financiamiento del crecimiento de los servicios urbanos - Australia

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1. Context

Australia has three tiers of government: federal, state and local. This paper summarizes the way transportation policy and planning is organized across these three layers, with the focus being on land transport. As a general principle, jurisdictional responsibility should be determined by the incidence of costs and benefits that are associated with particular in-scope policy issues/activities and by the powers of particular levels of government to effectively influence specific types of outcomes. Thus international aviation policy will be a matter for national governments, because impacts are primarily at the national and international scale and only national governments have the gravitas to negotiate on such matters. In Australia, then, aviation is primarily a national government responsibility in policy terms, but delivery has been privatized. International maritime issues are also a national responsibility but general ports are state responsibilities and operations are increasingly being privatized. There are, of course, many specialized ports that are linked (for example) to particular natural resource extraction projects, with private provision and operation being common. However, land transport is the area where governance arrangements involve the three levels of government on the most regular basis.

In developed economies, cities are the drivers of national economic performance but the primary scale for thinking about urban policy and planning integration sits at city level, not national. The rationale for this is that most costs and benefits of urban activity are contained within the city, rather than extending beyond. The national significance of cities in economic, environmental and social terms, however, justifies a role for the relevant federal or national government, while maintaining a primary urban policy and planning responsibility at the city-level. Within a country, if the government level that plays host to most benefits/costs lacks the capacity to effectively influence outcomes, as is frequently the case for cities for reasons such as poor revenue raising capacities, then institutional re-design to increase such capacity should be examined.

This paper outlines how Australia treats these matters in urban land transportation. Section 2 outlines the main roles played by state governments, with a focus on integration between land use and transport and how this is managed. Melbourne (Victoria) is used as an example to illustrate planning directions, while some discussion of Adelaide (South Australia) and Sydney (New South Wales) is included in an Attachment. Section 3 summarizes national and federal level involvements, distinguishing between the two. Neighbourhoods, an area of increasing interest, are discussed in section 4 and an overall assessment of the Australian approach to urban transportation planning is provided in section 5.

2. The role of State Governments

State Governments have primary responsibility for (urban) land transport in Australia, from system planning through to service delivery. The two major exceptions to this position are:

- Federal funding support, which is largely provided for roads that have national significance (e.g., National Highways) but also includes financial assistance for local authority roads, road accident black spots and some smaller items, and for elements of the National Rail network. Federal financial support for public transport has been uncommon in the past but this is likely to change with the appointment in 2015 of a new Minister for Cities and the Built Environment;
- Local government responsibility for the local road network, which represents over 650,000kms or more than 8% of Australia's total road network length.

By way of overview, total road funding in Australia in 2008-09, the latest year for which detailed compositional data is available, was \$A15.8 billion, of which the federal government accounted for \$A4.9b, the six States plus two Territories \$A6.6b, local authorities \$A3.4b and the private sector \$A0.9b. There is no comparable published comprehensive data for public transport funding but this is all largely funded by state governments (although City of Brisbane is a significant public transport funder and the Gold Coast Council is funding part of a new light rail service). In Melbourne, for example, state spending on public transport services in 2015 was a substantial \$A2.8b, which included \$A1.6b payments to private bus, train and tram operators.

State Governments are thus the major funders of Australian urban land transport, both road and public transport, and have the responsibility of system/service planning and delivery for public transport and major roads, together with strategic land use planning responsibilities. As noted above, local governments look after local roads and, in new housing estates, road provision is part of the development task for the developer. Private sector involvement in toll road provision has also been significant in Australia, subject to state government approvals (and sometimes including a federal funding contribution)

Urban land use transport planning

Land use transport planning is essentially a State Government regional function in Australia, where the major cities are the most important regions. Land use planning and transport planning for cities is thus undertaken by the relevant state government (with some variation in Brisbane because of the large size of City of Brisbane relative to the Brisbane urban area). Thus, for example, Melbourne's land use transport planning is undertaken by the Victorian State Government, through State Ministerial departments and related statutory authorities (such as the Metropolitan Planning Authority, Public Transport Victoria and VicRoads). The Melbourne experience is used to illustrate the way this planning is done, since there is much communality across the states. This is largely due to similarity of governance arrangements, as between the various states, but is also a function of the use of nationally aligned technical approaches which are embedded in national transport planning guidelines. These were first produced in 2006 under the auspices of the Australian Transport Council of Ministers (ATC) and are currently being updated by ATC's successor, the Transport and Infrastructure Council¹. These Ministerial Councils operate under the framework provided by the Council of Australian Governments, which is discussed further in section 3.

The urban transport planning process generally starts with the preparation of a long (20-30 year) term land use transport strategy for the city. These strategies are increasingly being linked to shorter term implementation plans (~10 years). In Melbourne's case, the current long term land use transport plan is *Plan Melbourne* (DTPLI 2014, which proposed the vision of Melbourne as a 'global city of opportunity and choice', focussing on seven outcomes to help realize this vision:

- delivering jobs and investment
- housing choice and affordability
- a more connected Melbourne
- liveable communities and neighbourhoods
- environment and water
- a state of cities
- implementation: delivering better governance

¹ The original 2006 guidelines and 2015 update are available at http://transportinfrastructurecouncil.gov.au/publications/files/national_guidelines_volume_1.pdf and <http://ngtsguidelines.com/> respectively.

These plan directions are solid and in line with the outcomes sought by long term strategic land use transport plans for most cities. In Melbourne's case the plan has been criticized by the Ministerial Advisory Committee (MAC) that advised the Planning Minister responsible for plan preparation on the grounds that it did not devote enough attention to identifying and enhancing what is unique and distinctive about Melbourne. The city has been rated the world's most liveable city by the Economist Intelligence Unit for the last five years and the distinctiveness that underpins this liveability is seen by the MAC as crucial for the city's international and national positioning on liveability.

The State Government that prepared *Plan Melbourne* was defeated at an election held shortly after its 2014 release, the incoming government deciding to 'refresh' the Plan. While many of the elements of the Plan are to be retained, the incoming government has changed the major transport priorities, primarily to delete a proposed major tollway project, amend the alignment for a major metropolitan rail capacity enhancement project and accelerate removal of rail level crossings (of which Melbourne has 170!). It has also increased the focus on tackling climate change and affordable housing. All these changes are supported by the current author, who has been a member of the MAC advising the past and current Planning Ministers on the Plan and its refresh.

Plan Melbourne, and comparable plans for other Australian cities, are long term strategic plans, with implementation usually the subject of a separate shorter term plan. Detailed modal integration usually occurs in the shorter term implementation plans, within an integrated strategic framework that is set at the long term level. Planning for individual modes tends to be undertaken by delivery agencies (e.g., Public Transport Victoria; VicRoads) but within a strategic framework set at government level, with departments advising the relevant Ministers and having strategic responsibility. There is a Minister for Roads and Ports and a separate Minister for Public Transport in Victoria but a single Transport Plan, put together by a transport department led process, that draws on inputs from delivery agencies and others. Cabinet level processes ultimately resolve conflicts between agencies in the process of integration.

The dominance of major transport infrastructure projects in city shaping, and in the economic, social and environmental performance of a city, is such that it is crucial for land use transport planning to start with a clear vision of the kind of city that is desired and to then use transport and other measures to help deliver that result (Cervero 2014). In this regard, there is an increasing tendency to seek integration of land use planning and transport planning for Australian cities, but the practice still falls short of the rhetoric.²

Melbourne's governing transport legislation is Victoria's *Transport Integration Act 2010* (Government of Victoria 2010, s.6). It refers to 'the aspirations of Victorians for an integrated and sustainable transport system that contributes to an inclusive, prosperous and environmentally responsible state'. This triple bottom line vision statement is typical of vision statements for most cities, not just in Australia. Section 11 of the Act says that

- (1) The [transport system](#) should provide for the effective integration of transport and land use and facilitate access to social and economic opportunities.
- (2) Without limiting the generality of subsection (1), transport and land use should be effectively integrated so as to improve accessibility and transport efficiency with a focus on—
 - (a) maximising access to residences, employment, markets, services and recreation;
 - (b) planning and developing the [transport system](#) more effectively;

² Australian cities are generally all aiming for more compact settlement patterns, with the degree of concentration being sought largely increasing with city size. Thus Sydney is aiming to accommodate a higher proportion of its future growth within the existing urban area than Melbourne and both have higher targets for infill than Perth, for example.

- (c) *reducing the need for private [motor vehicle](#) transport and the extent of travel;*
- (d) *facilitating better access to, and greater mobility within, local communities.*
- (3) *Without limiting the generality of subsection (1), the [transport system](#) and land use should be aligned, complementary and supportive and ensure that—*
 - (a) *transport decisions are made having regard to the current and future impact on land use;*
 - (b) *land use decisions are made having regard for the current and future [development](#) and operation of the [transport system](#);*
 - (c) *transport infrastructure and services are provided in a timely manner to support changing land use and associated transport demand.*
- (4) *Without limiting the generality of subsection (1), the [transport system](#) should improve the amenity of communities and minimise impacts of the [transport system](#) on adjacent land uses.*

Despite these provisions emphasizing the importance of integration, Hansen and Stanley (2014) indicate that there is still a tendency for some major transport projects to be imposed by the political process on land use plans, instead of transport priorities emerging from an integrated land use transport planning process. Integration of land use and transport still has some way to go in Australian cities but practice is improving fast.

A weakness of most Australian land use transport plans is that they have not included complementary funding plans, as part of their implementation plans. Adelaide goes furthest in this regard, indicating a funding gap of about \$6b between its desired priorities and its capacity to fund improvements (see Attachment).

A recent Australian trend, that is relevant to state-based land use transport planning, has been the establishment of state-based infrastructure bodies, sitting between land use transport plans and Treasury processes. These bodies advise their state governments on infrastructure investment priorities, mirroring a similar federal level entity (discussed in section 3). Infrastructure New South Wales (INSW), for example, advises the NSW Government on state infrastructure priorities, including transport priorities, taking inputs from the land use transport planning process and elsewhere. INSW recently (2014) proposed allocation of a \$A20b investment fund, which was derived from sale of NSW State ports. Urban land transport projects (rail and road, in particular) formed the major part of the recommended funding portfolio. This was not prioritization of complete infrastructure requirements within a transport plan so much as a way of dealing with a major State revenue windfall. More generally, state-based infrastructure bodies will provide advice on infrastructure priorities across all sectors, including land use transport, with transport typically being the largest state capital item. The author's view is that Infrastructure Advisory bodies would not be needed if the land use transport planning process was working properly. The weakness of land use transport implementation plans associated with long term land use transport strategies has been a major reason why separate infrastructure advisory bodies have been created.

More broadly, State prioritization processes for individual major projects usually involve a 'gateway' process. The NSW process illustrated in the footnote is typical.³ Cost-benefit analyses are a common requirement and, in the transport case, this is assisted by the availability of national guidelines, which were produced through the same process that developed the national transport planning guidelines. Volume 4 outlines (for example) public transport appraisal methodologies, including relevant

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https://www.procurepoint.nsw.gov.au/system/files/documents/procurement_process_and_gateway_diagram.pdf

parameter values.⁴ These guidelines are in the process of being updated, to include treatment of agglomeration benefits. The author still sees them as deficient in their treatment of social inclusion benefits.

3. The national/federal situations

The preceding discussion has included some references to the national level intergovernmental context within which land use transport planning operates in Australia. The Council of Australian Governments (COAG) is the peak intergovernmental forum in Australia, its members being the Prime Minister, State and Territory Premiers and Chief Ministers and the President of the Australian Local Government Association. Portfolio-based committees support COAG, such as the Transport and Infrastructure Council (TIC) discussed above. The Federal and State transport portfolio Ministers, with local government representation, meet on a regular basis as TIC, to deal with matters of common concern, such as vehicle standards, national road law and transport planning methodologies. Officer level arrangements support the Ministerial process.

Australia has a National Transport Commission, which is charged with improving the productivity, safety and environmental performance of the road, rail and intermodal transport systems. The NTC develops recommendations for approval by the TIC and monitors implementation. The matters covered by the NTC mainly affect the background operating environment of land use transport, across Australia as a whole, including matters such as the regulatory environment for use of the road network (e.g., vehicle mass, length and width regulations; performance-based standards; driving hours; road rules; emissions standards; dangerous goods), and safe operation of rail. It does not have any formal role in terms of urban land use transport planning.

A more significant body for urban land use transport planning is Infrastructure Australia (IA), which was established under the *Infrastructure Australia Act 2008* to advise the federal government. It is an independent statutory body with a mandate to prioritize and progress nationally significant infrastructure, from which the Federal Government can decide on its priorities for funding support. IA uses a rigorous prioritisation process, with extensive use of cost-benefit analysis, to help ensure there is a well-grounded pipeline of nationally significant infrastructure projects available.⁵ IA's website points out that it also provides research and advice to governments and the community on the projects and reforms Australia needs to fill its infrastructure gap. It does not make decisions regarding the funding of projects but independently assesses initiatives and projects which are submitted by governments and private sector proponents. IA publishes its assessments about the priority that should be accorded to particular initiatives in its Infrastructure Priority List.

IA worked for some time with a \$A100m minimum project threshold. This arbitrary limit tended to lead state governments to seek out big projects in the pursuit of scarce federal funding support. It seems to be acknowledged now that this was partly to the detriment of more balanced works programs and smaller scale opportunities are considered.

Beyond the processes operating under the aegis of COAG (TIC), the NTC and IA, there is no national transportation planning process as such in Australia, as this relates to land transport. This is largely a matter that is handled at state level, with some federal funding support, that support having been primarily geared to roads in the past, as noted above. A more balanced federal funding support program is expected in coming years, following the recent change in Prime Minister and appointment of a Minister for Cities and the Built Environment.

⁴ http://transportinfrastructurecouncil.gov.au/publications/files/National_Guidelines_Volume_4.pdf

⁵ <http://infrastructureaustralia.gov.au/projects/make-a-project-assessment.aspx>

In Australian cities, future federal involvement in urban land use transport planning might take the form of setting out its expectations of what long term strategic land use transport plans and shorter term implementation plans should contain if federal financial assistance is being sought for city projects, as currently happens to some extent with respect to Infrastructure Australian processes. Any such requirements should be grounded in long term strategic land use transport plans and associated shorter term implementation plans.

Alternatively, the federal government could take a more hands-on approach, which goes further than simply setting out its expectations and includes more active engagement around the best ways to use land use transport (and related) policies and programs in particular cities to meet national goals, such as boost productivity and cut greenhouse gas emissions. In this approach, federal involvement at board level involvement in state-based planning authorities might be appropriate. The outputs from strategic planning processes and implementation plans need not change from those considered in the preceding paragraph but the stronger and more active level of federal involvement during the preparation stage should facilitate more informed federal decision making and much easier processing of the outputs of the planning processes, including when it comes to funding issues. It seems likely to be a more efficient planning and decision-making process.

4. Neighbourhoods

Discussion about integrated land use transport policy and planning is primarily about

- the roles of the various levels of government and how these might best come together
- how particular levels of government can replace siloed or fragmented approaches with more joined-up, integrated approaches and
- how various forms of stakeholder engagement can best support these endeavours (including issues such as the role of PPPs).

At the same time internationally, there is a related set of discussions taking place about strengthening communities and devolving greater levels of influence over decision-making to the local level, where 'local' essentially aligns with what we might understand by neighbourhood.

Unpublished Australian research by Dr Janet Stanley on social inclusion and wellbeing, supported by the bus industry, has shown that people who rate well in terms of *positive affect* (feel that they control their environment, rather than the reverse) are more likely to be socially included and have high wellbeing. As a consequence, devolving greater influence and control to local communities is likely to enhance wellbeing, and this should flow on to wider benefits, such as greater economic prosperity. The idea of the 20 minute city or neighbourhood, where most activities required for a good life can be accomplished within 20 minutes walk, cycle or public transport trip (but not necessarily work) comes partly from this line of thinking. Australian cities are increasingly envisaging their futures as including a local or neighbourhood focus around ideas like this, *Plan Melbourne* (for example) including extensive discussion about the city functioning in future as a series of 20 minute cities and proposing some steps to assist achievement.

The neighbourhood level in Australia, per se, is not part of formal governmental structures or land use transport planning processes, neighbourhoods usually existing at sub-municipal level and/or crossing municipal boundaries. Also, linked with this status, neighbourhoods have no legislated revenue raising powers. Future integrated land use transport policy and planning needs to find ways to give neighbourhoods greater decision-making influence over matters that affect their wellbeing.

Neighbourhoods need to be incorporated into the public policy debate, without reducing the spontaneity and energy that characterises much activity at this level. This is likely to require greater neighbourhood influence over local funding allocation decisions, which will usually require some flow of funds from a level of government to the neighbourhood. This may be from the local authority but could also be from a higher level of government and may involve local supplementation.

5. Assessment

Australian cities regularly score highly in liveability ratings, Melbourne having been ranked top in the last five assessments by the Economist Intelligence Unit. This suggests that Australian cities are generally performing well. However, there are problems, such as:

- creating sufficient jobs for rapidly growing populations
- high and growing costs of traffic congestion
- public transport services that are straining under strong growth pressures and a long period of underinvestment
- high and growing greenhouse gas (GHG) emissions
- high house prices and associated supply shortages of new properties for owner occupancy and properties for rental
- relatively poor access to urban opportunities for those living in outer suburbs, with associated risks of social exclusion. Infrastructure, services and access to high productivity jobs in/from these fast growing suburbs have tended to lag population growth
- an ageing population, which puts increased pressure on a declining proportion of people of workforce age to contribute to supporting the growing numbers of older people. Ways of sustaining increased labour force participation are important.

Tackling these challenges demands effective integrated land use transport policies, plans and programs. Current state-based approaches are generally quite good, with the national guideline framework and role performed by Infrastructure Australia being good foundations for this work becoming more rigorous. Areas for improvement are:

- the need to more closely integrate land use and transport planning. Transport planning still tends to have a strong life of its own based around small numbers of major projects. These should be derived from land use plans rather than, as sometimes happens, being imposed on those plans, a practice that runs the risk of producing unintended and unwanted outcomes, particularly greater urban sprawl
- the inclusion of planning frameworks for policy issues that are closely related to land use transport planning within the integrated LUT planning framework. Affordable housing and social and community infrastructure provision, in particular, should be included in the strategic LUT process, to increase the inclusion of cross-sectoral synergies
- increasing the level of local government and wider community input to the strategic urban LUT planning process, to enhance the likelihood of bipartisan political support for plan directions. The lack of such support is a reason why Australian strategic LUT plans tend to not have long lives
- giving greater weight to neighbourhood level considerations in the planning process, such that it becomes both top down and bottom up. This will require both governance and funding reforms
- incorporation of integrated funding plans within (~10 year) LUT implementation plans. This practice may be assisted by the establishment of state-based infrastructure advisory entities

- closer engagement of the federal government in the LUT planning and project delivery process, where a new approach needs to evolve in coming years in the context of a more committed federal government.

One other area that needs urgent attention is balancing the revenue raising capacities of cities with their expenditure responsibilities, including in land use transport. This is a problem that confronts many cities. Part of the solution is likely to be greater use of value capture techniques, to help fund transport initiatives that create value gains, and reforming road pricing, to make users more accountable for the costs of their travel decisions. The latter will lead to desirable behavioural responses and generate a revenue stream to help improve transport infrastructure and services.

Attachment A: Adelaide, Sydney and Melbourne

This attachment is an overview of the Adelaide, Sydney and Melbourne land use transport plans, which is largely reproduced from a 2014 paper by the current author and a colleague. It illustrates the way Australian states are tending to approach these tasks (Hansen and Stanley 2014).

Greater Adelaide

South Australia (SA) has prepared an impressive integrated suite of documents in the state's Strategic Plan (which sets out seven strategic directions), Planning Strategy, Infrastructure Plan and Integrated Transport and Land Use Plan. The major focus in the following discussion is on the Integrated Transport and Land Use Plan and on those parts of that Plan that deal with Greater Adelaide.

The suite of planning documents opens with a description of the unique elements of Adelaide, which include *'a quality of life that's amongst the best in the world, thanks to our unique blend of heritage, culture, scenery, lifestyle, infrastructure, food and wine, safety and liveability'* (Government of South Australia 2013a, p. 6).

These qualities are seen as providing the foundation for a strong future state/city. At the same time, and very importantly, the strategic directions recognise fundamental structural economic shifts that are weakening manufacturing employment opportunities, and providing opportunities for strong growth in services employment, particularly knowledge-based services. These structural economic changes are tending to increase relative employment opportunities in inner areas and reduce them in outer areas.⁶ High population growth in outer areas is, therefore, tending to increase travel requirements. Such considerations have led to a policy and planning approach that aims to increase the existing urban area's share of Greater Adelaide's growth from the current 50 per cent to 70 per cent over the thirty-year planning period. A planning approach that particularly seeks to increase population and jobs in the inner and middle areas is the result, with transport policies and plans intended to support that direction, while also tackling existing transport problems (including the need to improve services across the whole city, including outer areas).

Six main transport/land use challenges are identified (Gov't of SA, 2013a):

- growing the role of public transport in servicing the city, and urban and regional centres
- providing efficient connections to export/import gateways
- prioritising transport infrastructure and services to encourage mixed-use development in central and inner Adelaide
- supporting lively communities by encouraging active travel modes
- fine-tuning, maintaining and better utilising existing transport assets
- developing and maintaining a planning system that ensures integrated transport and land use.

The Transport and Land Use Plan proposes the following priority solutions to these challenges:

- continued improvements to the public transport network: for example, further rail electrification, station improvements, park and ride upgrades, and timetable co-ordination
- bringing trams back to the CBD and inner Adelaide: perhaps the most distinctive element of the Plan
- a redesigned and modernised bus system: based on a corridor approach, with faster and more frequent services, on-road priority and more local services

⁶ *Plan Melbourne* was partly based on more detailed analysis of these trends (DTPLI 2014).

- integrated planning to support a more compact Adelaide: with a focus on creating mixed-use precincts around transport networks and interchanges, and encouraging higher densities in these locations
- enhancing vital freight and road traffic corridors: with a focus on gateways, employment/industrial clusters and key corridors
- less reliance on cars, and fewer trucks on city streets: again focusing on encouraging development around urban hubs and jobs growth closer to where people live, including the CBD
- more travel options and more sustainable and healthy travel choices.

Compared to the larger cities of Sydney and Melbourne, Adelaide is relatively mono-centric. Its CBD accounts for the highest proportion of jobs within any Australian state capital city (at over 20 per cent). However, the Integrated Plans recognise the need to focus on development across the whole city and detailed project proposals across the various parts of Greater Adelaide are intended to deliver against the above directions, adding up to an impressive set of integrated strategies. The identification of centres, villages and neighbourhoods, and the development of transport ideas around supporting such centres, are very much in line with the general principles outlined above.

Two issues stand out in terms of the deliverability of the Transport and Land Use Plan. First, the Plan estimates a project funding requirement of \$29b over the 30-year planning period for projects that may need to be funded by the South Australian and Australian Governments, but projects a likely availability of only \$23b against this total. Increased private sector participation, making better use of existing infrastructure and improving delivery are noted as some ways that might be used to help ease funding pressures. However, there is no exploration of possible new funding opportunities and, hence, there remains no solid solution to the apparent funding gap of about \$6b. This raises some doubts about the deliverability of the very impressive Plan.

The second issue of deliverability goes to the expectations that are being placed on public transport. The Technical Document that supports the Plan (Government of SA 2013b) indicates that the public transport mode share target is 10 per cent of metropolitan weekday passenger vehicle kilometres travelled by 2018, up from 6.9 per cent in 2011/12. That share was higher, at 7.6 per cent, in 2004/05. The transport role to be performed by public transport, walking and cycling will need to grow at a significantly greater rate than it has in recent years, and on a sustained basis, if it is to support a 70 per cent share of growth taking place as urban infill within 30 years. There must be some doubts about whether the Plan goes far enough in terms of the initiatives in these modes that will be required to fully support such a progressive urban planning direction. This is moving into unknown territory, so it is important that regular performance monitoring takes place, to assist plan adjustment if required. The intent to update the Plan every five years is an appropriate response in this regard.

Greater Sydney

Partly reflecting the complexity that accompanies scale, the Sydney land use and, more particularly, transport plan is overwhelming in its detail and evidence base. The Sydney planning horizon in its draft Metropolitan Strategy for Sydney to 2031 is slightly shorter than Adelaide's (to 2036). This document is supported by a State Infrastructure Strategy and NSW Long Term Transport Master Plan.

Consistent with the vision statement outlined above, the guiding principles for the Sydney Metropolitan Strategy are (New South Wales Gov't 2013, p. 7):

- strengthen Sydney as Australia's pre-eminent city
- promote and facilitate growth throughout Sydney in a balanced way that reflects community and business feedback and environmental and market considerations
- integrate infrastructure, transport and land use
- provide housing choice while substantially increasing supply to capitalise on existing and planned infrastructure and provide market-led solutions
- sustain a whole-of-government management approach to get things done
- deliver balanced growth through a new planning framework (Sub-regional Delivery Plans).

A defining and unique part of the Sydney Draft Plan is the nine 'city shapers', areas identified '*because of their scale and the opportunities they present for change and investment in Sydney. They will shape how our city functions and are critical to Sydney's growth*' (NSW Gov't 2013, p.7).

These city shapers are: Global Sydney, Global Economic Corridor, Sydney Harbour, Parramatta, Parramatta Road Corridor, Anzac Parade Corridor, North-West Rail Link Corridor, Western Sydney Employment Area and Sydney's Metropolitan Rural Area. The focus on these areas is intended to help ensure that transport and infrastructure are close to where people work and live.

The Sydney Strategy sets out minimum sub-regional targets for population and jobs, including a target of at least 50 per cent of all new jobs to be created in Western Sydney. However, we were not able to find a demonstrable connection between the content of the series of published plans and the achievement of specific sub-regional employment (and population) outcome targets. This requires complex structural spatial economic analyses, which are at an early stage in Australian and international urban planning and modelling. It is understood that such analyses are currently being developed, which is a very important step forward in understanding Australian urban economies. Melbourne's Plan (discussed below) has undertaken some such investigation and Adelaide has dealt with it in general terms.

A very important concept behind the Sydney Plans is the idea of a networked city. This concentrates on a hierarchy of urban nodes/areas and the corridors that connect these nodes/areas. At the top end of the nodal hierarchy are Global Sydney, Parramatta, Liverpool and Penrith, together with some specialised centres (e.g. Port Botany, Sydney Airport, Westmead Health and Norwest Business Park).

The networked city concept flows through to the Transport Plan, where there is a detailed analysis of transport corridors (46 strategic transport corridors) that are required to service the land use pattern. These corridors include a Strategic Transit Network, with associated service standards linked to the position of locations within the hierarchy, intended to provide public transport connectivity to the networked city. Public transport service standards are categorised as mass transit, intermediate transit and local transit. The major focus in the Plan is on the mass and intermediate transit levels. Local transit is relatively underdone, as is the way local neighbourhoods can be supported to play their role in the city. This is reflected, to an extent, in the prediction that total daily trips will increase by 31 per cent by 2013 (all modes) but that bus service kilometres will only increase by 16 per cent. This seems inconsistent in a strategy that is looking to public transport, walking and cycling to play a bigger role, particularly in Western Sydney, where jobs growth is a priority.

The emphasis in the Sydney transport plan is very much strategic and major node/corridor focused. The Plans are very strong at this level but lacking a convincing connection back to the drivers of structural employment growth throughout the city. The local transport focus remains an area that merits further work. This comment also applies to Adelaide and Melbourne but to a lesser extent.

More broadly, eight objectives are set for the NSW transport system (NSW Gov't 2012, p. 22):

- improve quality of service
- improve liveability
- support economic growth and productivity
- support regional development
- improve safety and security
- reduce social disadvantage
- improve sustainability
- strengthen transport planning processes.

These essentially fall out of the vision statement, adding a customer focus and planning focus.

A major weakness of the set of Sydney Plans is the absence of an integrated financing/funding plan. The Sydney Plans do not go as far as the Adelaide Plans in estimating the overall investment requirement and likely availability of funds. It is acknowledged that increased spending will be required and some opportunities are noted, being supported by some other very impressive NSW Government investigations (e.g. NSW Treasury 2011) but there is no closure on such matters.

The other notable gap in Sydney's Plans is planning for future airports, whatever the solution. This will be a critical infrastructure issue to get right.

Melbourne Metropolitan Area

Plan Melbourne (DTPLI 2014) sets out the planning strategy for the city to the year 2050. The Plan itself endorses some of the key principles which underpinned its predecessor *Melbourne@2030*. However, it aims to be an integrated land use and transport plan.

To realise its vision for Melbourne as 'a global city of opportunity and choice' the plan focuses on the following seven outcomes, each with a set of directions and initiatives to put the plan into action:

- delivering jobs and investment
- housing choice and affordability
- a more connected Melbourne
- liveable communities and neighbourhoods
- environment and water
- a state of cities
- implementation: delivering better governance

The Plan acknowledges the economic restructuring occurring in Melbourne, with impressive growth in business services, population-driven services especially health, education and the service sector generally, and freight and logistics. It highlights a new economic geography for Melbourne, focused around a polycentric city comprising:

- a substantially expanded Central City (CBD) which unlocks the redevelopment capacity of vast tracts of urban renewal land edging the city centre
- six National Employment Clusters underpinned by major health and educational institutions and other research and innovation driven businesses
- fewer Metropolitan Activity Centres (MACs) distributed throughout the metropolitan area and operating as sub-regional hubs for retailing, services and facilities
- gateways to Melbourne, namely the Ports of Melbourne and Hastings, and Melbourne and Avalon Airports, which link goods to markets and people to business and tourist activities.

Unlike the Sydney Strategy, *PlanMelbourne* does not set job targets within each of the five sub-regions comprising the metropolitan area. Even in terms of population distribution, the Plan contains estimates of growth within each of the five sub-regions but sets no targets for the total number of new dwellings needed to accommodate future growth. Common to the Adelaide and Sydney Plans, there is a lack of clarity around the types of jobs that may or could be attracted to each sub-region outside of the expanded CBD, the designated clusters and MACs. An Integrated Economic Triangle is proposed by 2050, which is structured primarily around freeways and rail corridors. However, for the 85 per cent of metropolitan jobs that are located outside the CBD (including Docklands and Southbank), the transport agenda is largely dependent on reducing the number of at-grade level crossings, improving connections between different public transport modes for trunk services, with radial public transport movements the priority, and delivering an East West Link traversing the inner suburbs but no clear direction for trams and buses. It is difficult to see how the land use aspirations of this plan will be facilitated by the designated investment in the city's transport infrastructure. The continued reliance on the radial fixed rail and tram services, combined with a freeway network which is already congested, will struggle to connect people more efficiently to jobs, given that the suburban pattern of jobs relies heavily on good cross-town access.

At a broader level, Melbourne, like other capital cities in Australia, is suffering from a legacy of inadequate investment in both hard and soft infrastructure. Words such as liveability, affordability, productivity, sustainability and social inclusion are now being assessed in relation to the cost of housing (to buy or rent) as well as the cost of living, the provision of educational and health services and the ability to access a job close to home. *PlanMelbourne* acknowledges these challenges but, on the whole, fails to provide tangible solutions beyond initiatives bedded in more investigations, amending planning schemes and further information collection. There is little evidence of a concrete, action-oriented agenda necessary to actually realise the strategic directions and hence the vision for Melbourne.

As is the case with the Sydney and Adelaide Plans, *PlanMelbourne* lacks an integrated funding and financing plan. Identified 'new' funding sources are development contributions, government capitalising on value capture opportunities and unsolicited private sector driven initiatives. Experience tells us that Melbourne will need more than these relatively standard funding approaches to catch up on the infrastructure back log and create more housing closer to where the jobs are now, and in the future. Similar comments apply to the Adelaide and Sydney plans.

On the big question as to how to implement the plan, there are still many unanswered questions as to how government at the state, municipal and federal levels should best organise themselves to deliver the intended outcomes. This concern is common to other city's plans.

References

Cervero, R. (2014), 'Land use/transport integration: implications for infrastructure in North American and Australian cities', in Stanley, J and Roux, A (Eds.) *Infrastructure for 21st century Australian cities*, Melbourne: ADC Forum.

Commonwealth of Australia (2008), *Infrastructure Australia Act 2008*. <https://www.comlaw.gov.au/Details/C2014C00639>. Viewed 20th November 2015.

Department of Transport, Planning and Local Infrastructure (2014), *Plan Melbourne: Metropolitan Planning Strategy*, Melbourne: Victorian Government, May.

Government of South Australia (2013a). *Building a Stronger South Australia: The Integrated Transport and Land Use Plan*. October.

Government of South Australia (2013b). *Building a Stronger South Australia: The Integrated Transport and Land Use Plan: Technical Document*. October.

Hansen, R and Stanley, J (2014), 'Integrated approaches to city infrastructure', in Stanley, J and Roux, A (Eds.) *Infrastructure for 21st Century Australian Cities*, Melbourne: ADC Forum.

NSW Government (2012). *NSW Long Term Transport Master Plan*, December.

NSW Government (2013). *Draft Metropolitan Strategy for Sydney*, March.

NSW Treasury (2011), *NSW Financial Audit*, September.

Translink. Available from <<http://www.translink.ca/en/Plans-and-Projects/10-Year-Plan.aspx>>

Victorian Government (2010), *Transport Integration Act*. [http://www.legislation.vic.gov.au/domino/web_notes/ldms/pubstatbook.nsf/f932b66241ecf1b7ca256e92000e23be/800014F6404488AACA2576DA000E3354/\\$FILE/10-006a.pdf](http://www.legislation.vic.gov.au/domino/web_notes/ldms/pubstatbook.nsf/f932b66241ecf1b7ca256e92000e23be/800014F6404488AACA2576DA000E3354/$FILE/10-006a.pdf). Viewed 20th November, 2015.