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Policy Paper 8

Local government roles in C21
integrated land use transport planning

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Foreword

This research Policy Paper is part of a policy series of publications aimed at decision and policy makers, academics and students.

This Policy Series focuses on land transport, land use, integrated planning and urban development challenges in Australia.

The Policy Series has been developed by the Bus Industry Confederation (BIC) of Australia and the Institute of Transport and Logistics Studies, Business School, University of Sydney, and addresses specific subject matters and issues raised in the BIC's previous reports: "Moving People - Solutions for a Growing Australia" and "Moving People - Solutions for a Liveable Australia." Both publications are available at www.ozebus.com.au.

1. Setting

The Bus Industry Confederation (BIC) has now released seven Policy Papers over the last 2 years, all of which have focused on important aspects of how Australian cities, in particular, can become more productive and socially inclusive, while lowering their environmental footprint. Land use transport policy and planning directions, including associated governance and funding arrangements, have been developed through this Policy Paper series.

Policy Paper 1 argued for a lift in Australia's rate of land transport infrastructure spending and greater recourse to user pays charging, particularly for road use (cars and trucks), including all relevant external costs, together with value capture to help fund improved public transport services. The challenge of public and political acceptability of road pricing reform was recognised but declining fuel tax revenues were seen as a reason for optimism that change might not be far off. Policy Paper 1 also recognised the need to review the way public transport is priced, once road user charging is properly reformed.

To substantially improve the sustainability of our land transport systems, Policy Paper 2 proposed that Australian cities set an ambitious target of zero growth in vehicle kilometres of car travel for coming years, which is in line with thinking in places like Vancouver and London. It suggested that this would be a feasible goal if supported by density increases, including higher minimum density targets for growth suburbs, together with substantially improved public transport service levels and road pricing reform, as discussed in Policy Paper 1.

Policy Paper 3 presented a far more detailed analysis of options for funding growth in urban public transport services. Value capture opportunities that were noted in Policy Paper 1 were explored in much more detail and examples where this is happening were discussed. Road user charging and value capture (both low rate generic charges and project specific levies) were seen as the preferred way forward, in terms of beneficiary pays and polluter pays principles, with higher fuel excise a shorter term opportunity.

Policy Paper 4 explored the important Plan Melbourne idea that our cities should be shaped at local level around the concept of the 20 minute city (or neighbourhood), where most of the things needed for a good life would be available within 20 minutes by foot, bicycle or on public transport. The benefits of this urban form were discussed and minimum local bus service levels to support achievement of the 20 minute city were identified, with supporting development densities. The outer suburbs and parts of the middle suburbs were seen as where most attention needs to focus for lifting densities and improving public transport service levels. Alternative delivery options for local public and community transport in low density settings (urban and beyond) were discussed.

Policy Paper 5 drew attention to the forgotten middle suburbs of Australian cities, arguing that urban productivity levels could be enhanced, and the benefits of this enhancement be more widely shared, if our cities were to focus on building up a small number of inner/middle urban high tech/knowledge-based clusters, as a new element in their urban spatial structure, at a rate of about one per million population. High quality trunk public transport services are crucial to the chances for success of this development format.

Governance arrangements are increasingly being recognised as vital to the success of a city, in terms of supporting integrated policy, planning and delivery, both across layers of government and within each layer. Policy Paper 6 argued that having someone or some entity able to speak for the city is a key requirement for good urban governance. The new Greater Sydney Commission is a very positive development here, because it recognizes the importance of state and local authorities partnering to speak for the city. Incorporation of the neighbourhood level within urban governance frameworks was seen as a corollary of the pursuit of the 20 minute city.

State and federal government roles have been important discussion points in the various papers but local government's role has received less attention. The current Policy Paper seeks to remedy this shortcoming, examining ways in which local government can support the major development directions and, based on the conclusions from the governance Policy Paper 6, be recognised as a vital partner in so doing. It does this by looking first at desirable development directions for our cities and regions, then exploring local government roles in these directions, at both the strategic and local levels. It does not seek to cover all bases in these areas but focuses mainly on matters associated with land use transport integration, and closely related matters. Section 2 elaborates somewhat on the main land use transport development directions summarised here, drawing on the preceding BIC Policy Papers and on a book currently in press, co-authored by John Stanley, Janet Stanley and Roz Hansen (Stanley et al. forthcoming). Section 3 discusses local government's role in strategic land use transport planning and governance arrangements to support the performance of that role. Section 4 moves the focus to land use transport integration at local level and local government's role at that level. Section 5 presents the report's main conclusions.

2. Land use transport development directions: Goal setting, land use and then transport

Prior BIC Policy Papers have argued that, if our cities and regions are to sustainably improve the wellbeing of all their citizens, present and future, and protect the planet in so doing, then strategic goals something like the following are needed for land use transport planning:

1. Increase economic productivity
2. Reduce environmental footprint
3. Increase social inclusion and reduce inequality
4. Improve health and safety outcomes
5. Promote intergenerational equity – this goal is likely to be achieved if the preceding goals are met
6. Engage communities widely
7. Pursue integrated land use transport plans.

Most cities express their outcome aspirations as some form of triple-bottom line goals, along the lines of goals 1 to 5 in this listing, and process goals (like 6 and 7) are also common. It is also important for a city/region to clearly understand its distinctive strengths, those things that set it apart from others. Such clarity of vision is of considerable help in shaping what is to follow in land use transport planning. The idea of distinctiveness brings in the important role of place making in the elaboration of a city/region's sense of itself and in the delivery elements.

The BIC strongly supports Professor Robert Cervero's view that 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 then use transport and other measures to help deliver that result (Cervero 2014). Access to jobs, education, services, family and friends, recreational and cultural opportunities and the like are common reasons why people live in and move around cities and regions. The concept of accessibility, of being able to reach places to undertake activities, ties land use and transport together.

The most comprehensive review of connections between the built environment and travel is the meta-analysis by Ewing and Cervero (2010), who talk about the following five 'Ds' of built form in terms of how they impact (in particular) on car travel distances (vehicle kilometres of travel, or VKT):

1. density - higher densities support more local activity opportunities, higher public transport service levels and walking. Destination density is particularly important
2. diversity of land uses makes it easier to undertake activities locally, associated with concepts such as mixed-use development and jobs/housing balance

3. design - particularly creating interesting places where people want to be, are safe and feel safe and promoting interactions between people and with the natural environment, which is important for wellbeing
4. destination accessibility - which is about ease of access to trip destinations and developing activity nodes and corridors which link these nodes and
5. distance to transit, supported by fine-grained pedestrian opportunities, embedded in design elements such as intersection density and street connectivity. For example, Ewing and Cervero (2010) find that halving the distance to the nearest transit stop is associated with a 29 per cent increase in transit trips.

Ewing and Cervero report impact elasticities, which show the relative sensitivity of response variables (primarily VKT in their case) to changes in a range of causal influences (the respective Ds). Most individual reported elasticities are small but the combined effect of a number of measures can be significantly large, particularly when regional and local measures are both used. This underlines the importance of integrated approaches to land use transport policy and planning, in this case encompassing integrated regional and local scales of thinking.

In terms of starting integrated land use transport planning, many cities in Europe, Canada, Australia and much of the US now commonly focus on achieving more compact urban settlement patterns and the logic of triple bottom line goal achievement similarly suggests compactness as a worthwhile direction for regional development (e.g. to reap regional economies of agglomeration, reduce social exclusion and reduce the environmental footprint). The focus on achieving more compact cities has often concentrated on increasing densities through high-rise development in central/inner areas, where accessibility levels are usually highest, but there is also considerable interest now in medium density development around major transit nodes and along strategic transit corridors, including in inner and middle urban areas. Vancouver has been very successful at focusing infill development along strategic transit corridors, as discussed in BIC's Policy Paper 5. This development direction is also reflected, for example, in The London Plan (Mayor of London 2015), and is becoming more common in cities like Sydney and Melbourne.

The compact settlement model more broadly is reflected in movements such as Smart Growth, New Urbanism and Transit Oriented Development (see, for example, Haas 2008). Thinking behind such approaches typically encompasses perspectives like the following, supporting argument for which has been elaborated in different BIC Policy Papers, building on work by ADC Forum (ADC 2010):

- planning should be for whole communities, providing for access to jobs, schools, shops and services, recreational facilities, open space, and for access to other people
- outward growth of cities should be constrained
- ‘green’ areas should be retained within and around cities
- ‘close-to-market’ agricultural and horticultural land should be retained as far as possible
- large cities should have a networked polycentric shape rather than just a single central business district
- higher density and mixed use development should be encouraged at public transport stops, particularly rail stops but also along major public transport routes (for example tram lines and key trunk bus routes)
- all neighbourhoods should have access to urban villages, be walkable and cyclable
- use of public transport should be encouraged wherever possible
- use of the car should be discouraged wherever possible
- open space and recreational space, including natural areas, should be accessible within every neighbourhood
- public space should be at human scale, well designed, safe and encourage concentrated and varied activity
- neighbourhoods should have diverse housing to enable people of widely differing ages, capacities and economic levels to live there, maintaining social interactions and connection with their local community
- housing, neighbourhoods and cities should be planned to maximize energy and water efficiency and minimise urban heat island impacts
- planning for industry and freight should include consideration of neighbourhood amenity as well as economic efficiency
- regional residential and employment land use should be built around public transport
- cities should have the capability to respond to natural and man-made disasters and the resilience to respond and rebuild.

Neighbourhoods are key building blocks to achieve a well-functioning city (Jacobs 1961). Meeting challenges necessitates the involvement of strong communities, capable of maintaining wellbeing while undergoing change. Strong communities arise from well-resourced and well-functioning neighbourhoods. Such neighbourhoods will be good for people, the environment and economic participation (Stanley et. al. 2015). All neighbourhoods need to offer the activities and social infrastructure to meet essential needs: personal wellbeing, mental health and social equity; a sense of place and belonging; participation and choice; and the ability to successfully adapt to external challenges. The ability to be mobile and be able to access friends, activities, government and business, is a requirement to achieve most such needs. However, it is unusual to see neighbourhood level thinking embedded in strategic land use transport planning in other than a relatively banal fashion. The idea of the 20 minute city (sometimes called the 20 minute neighbourhood) seeks to achieve this embedding. Some cities that have demonstrated an explicit systemic focus and understanding at neighbourhood level, integrated with top-down regional thinking, include Portland (Oregon), Vancouver, Freiburg (Germany), Berlin, Malmö (Sweden), New York and Melbourne’s recent work on 20 minute neighbourhoods, building on Portland’s work.

The idea of a 20 minute city or neighbourhood is that land use transport planning should aim, in part, to ensure that most (but not all) activities that people need for a good life are available within a 20 minute trip on foot, by bicycle or on public transport from where they live. This requires a range of local activities and it requires local mobility choices, particularly safe walking/cycling opportunities and an adequate service level on local public transport (discussed in more detail in Section 4). Good mobility opportunities and availabilities of local services and infrastructure can, in turn, most easily be provided where urban densities are planned for this purpose, thereby also reducing the need to travel (also discussed in Section 4). Initiatives like ‘complete streets’ should be integrated with ideas like that of the 20 minute city.

3. Local government's role in strategic land use transport planning

3.1 Broad strategic land use transport development directions for our cities

The main land use implication of BIC's Policy Papers 2, 4 and 5 is that, to pursue the high level goals outlined in Section 2.1, the most desirable strategic land use development direction for Australia's largest cities is to pursue more compact settlement patterns, anchored by:

- the CBD and close surrounds
- a small number of high tech/knowledge-based clusters (which should form the basis for a polycentric city and focal points for inner/middle urban area growth)
- major urban renewal opportunity areas (e.g. in areas that have lost large numbers of manufacturing jobs)
- major transport corridors that link the core nodes to the centre, to each other and to outer areas and tie in the renewal opportunity areas
- a series of constituent 20 minute cities/ neighbourhoods.

This land use development direction should be embedded in integrated strategic long term land use transport plans for our major cities, recognizing the need for local nuance. Supportive strategic transport directions are an essential part of delivering on these land use directions and BIC's Policy Paper 5 summarised the following relevant strategic transport development directions:

- ensuring strong radial public transport to the central area of our cities
- good arterial roads across the entire city
- fast and frequent trunk public transport services supporting inner/middle urban nodes, particularly for circumferential movement, linked to the cluster (node)/transit corridor development focus
- better public transport connections from outer suburbs to areas of employment/activity concentration, particularly the high tech/knowledge-based clusters
- supportive local public transport access, through delivery of the 20 Minute City
- high priority to walking and cycling throughout the whole of our cities.

Governance arrangements should be such as to assure integrated delivery of these development directions across levels of government.

If the likely origins and consequences of a policy concern, and of the impacts of interventions to respond to this concern, cross jurisdictional boundaries between levels of government in terms of roles and responsibilities (perhaps better imagined as communities of interest represented by these levels of government), then effective institutional arrangements need to facilitate and manage this cross governmental involvement, even if service delivery responsibilities lie largely (or entirely) at one particular level of government (as is common, for efficiency reasons). Horizontal integration is often used to describe integration across institutions/stakeholders for a particular level of government (e.g. as between a number of local authorities or across state government entities, encompassing perspectives such as roads and public transport, schools and hospitals, jobs and social inclusion, and/or between government and its many contractors). Vertical integration describes integration across levels of government (e.g. local, state, federal). With increasing interest in the role of neighbourhoods as bases of strong communities, reflected in ideas like the 20 Minute City, the concept of vertical integration also needs to extend beyond local authority level to encompass neighbourhoods. Strategic land use transport policy and planning for cities usually requires integration across both the vertical and horizontal dimensions, because of the nature and scale of impacts involved.

If a city contains a number of local authorities, a common response internationally is for responsibility for strategic land use transport planning to be devolved to the multiple local authorities within the city region, acting regionally (e.g. as in Vancouver). The capacity to think and act regionally is a key requirement for this approach to be successful. Alternatively, in a multiple local authority context, a higher level of government, such as a state or provincial government, may take responsibility for the city, rather than devolve this to a form of aggregated local authorities. This is the practice in Australia and also in cities like Toronto (Ontario). It is less than ideal in terms of 'speaking for the city', because the responsible entity has wider interests, which may compete with those of the city.

The difficulties Australian cities have in sustaining consistent long term integrated strategic land use transport policy directions over time is partly a function of our adversarial political environment. International examples reviewed in BIC's Policy Paper 6 suggest that high levels of community engagement in setting a vision and goals for a city, and in determining long term strategic development directions, provide buy-in to support long term bipartisan approaches. They also suggest that local government can play a useful role in achieving community buy-in, if it can think regionally (beyond its own patch). This is easiest when there is a single municipality for the city but various ways of aggregating multiple local governments to regional level are being tried, as is the city mayoral model. Increasing the role of local government in strategic land use transport planning processes for Australia's cities seems likely to support better achievement of long term commitment to vision, goals and strategic directions, while leaving space for adjustment as circumstances change. It should help to de-politicize the planning process. Greater levels of community engagement are also important in this regard.

BIC's Policy Paper 6 argued that establishment of Metropolitan Planning Authorities for each of our capital cities, with responsibility for developing strategic land use, transport and related policy and planning directions, where board membership is split equally between representatives of the state government and local government, should be supportive of better planning and deliver better outcomes. The municipal representatives would generally need to be selected from sub-regions of local government, to keep numbers manageable. A federal government representative should also be considered. This would require the state to give up an element of its current power but is likely to deliver better community outcomes, which is what should be important. The Board Chair would speak for the capital city on land use transport (and related) matters when a regional voice is required. Some states already have entities that could easily be re-shaped to perform this role, to avoid adding a new layer of bureaucracy.

The purposes, and board composition, of the recently established Greater Sydney Commission reflect this general approach but makes no provision for federal involvement at board level. Section 9 of the Greater Sydney Commission Act 2015, provides that:¹

The principal objectives of the Commission in exercising its functions are as follows:

(a) to lead metropolitan planning for the Greater Sydney Region,

(b) to promote orderly development in the Greater Sydney region, integrating social, economic and environmental considerations with regard to the principles of ecologically sustainable development contained in section 6 (2) of the Protection of the Environment Administration Act 1991,

(c) to promote the alignment of Government infrastructure decision-making with land use planning,

(d) to promote the supply of housing, including affordable housing,

(e) to encourage development that is resilient and takes into account natural hazards,

(f) to support ongoing improvement in productivity, liveability and environmental quality,

(g) to provide increased opportunity for public involvement and participation in environmental planning and assessment in the Greater Sydney Regions.

These objectives closely reflect the seven objectives outlined in Section 2, as do those of most cities. Board membership comprises:

- four commissioners appointed by government on a skills basis
- district commissioners, representing the (6) districts declared under Section 75AB of the Planning Act. In making appointments for these positions, the Minister (for Planning) is to seek advice of local councils in the applicable district

- three state departmental heads, as ex-officio members (Department of Planning and Environment; Transport; Treasury).

This provides a balance in representation between state and local level interests, which then requires a genuine partnership between these levels of interest for effective delivery. In this regard, District Plans are in preparation, to translate the Greater Sydney strategic plan (A Plan for Growing Sydney) to district level. Local Environment Plans, for local authorities in each district, then need to be consistent with the District Plans (and with the Sydney Plan until such times as District Plans are in place). This structure seems to provide good top down alignment from region (Sydney) to district (6) and then to local government. It remains to be seen, however, whether this allows sufficient freedom for bottom-up innovation, from neighbourhood level, a matter that the district commissioners need to advocate for strongly. This may not be an easy task, given that the concept of neighbourhood is not significant in A Plan for Growing Sydney.

An alternative approach being taken by some cities that include multiple local authorities is to elect a mayor who speaks for the city. BIC's Policy Paper 6 proposed that it is time Australian capital cities discussed the merits of directly electing a Mayor for the Metropolitan area, with particular responsibilities for (at least) regional land use and transport, and consider how such a governance model might operate. The London experience provides a useful example. Such an arrangement could accompany the Metropolitan Planning Authority (or Planning Commission) model, where the elected Mayor would chair the Authority, rather than a state or municipal representative. London's experience suggests that this would support innovation, through the involvement of a Mayor, while the professional support from the Planning Authority should provide the necessary strategic and tactical level underpinnings. The merits of having an elected mayor for each capital city should be subject to community discussion.



¹ http://www.austlii.edu.au/au/legis/nsw/consol_act/gsca2015293/s9.html, accessed 4 April, 2016.

3.2 Local government strategic role

3.2.1 Some key considerations

It has already been suggested that local government, through sub-regional or district representatives (when such a level for planning is in place) should be an advocate for the inclusion of strategic neighbourhood level thinking in city planning. More broadly, what matters should concern local government in terms of city strategic planning? Simple really: all of them, provided local government thinks regionally in the process. Thinking regionally involves resolving how individual local authorities and their citizens can best contribute to city-wide achievement of strategic planning goals, such as those outlined in Section 2, to the formulation of which they should contribute. It also involves identifying how the whole (the region) can best contribute to the wellbeing of its various parts (sub-regions and constituent local authorities). In both areas, local knowledge is crucial. A few examples can illustrate how this might work.

Setting transport (including public transport) service priorities, including infrastructure upgrade requirements, tends to be a top-down process in Australian cities. However, resolving such matters will be most effective when fully informed by local values, challenges and opportunities. This point can be illustrated by focusing on the movement versus place conflicts that are endemic in urban planning, with the London Roads Task Force a good recent example. The Task Force was established by the Mayor to focus on how to tackle the challenges facing London's streets and roads, against the background of The London Plan (Mayor of London 2015). The Task Force's report sets out a vision of World class streets and roads, fit for the future (RTF, 2013, p. 4).

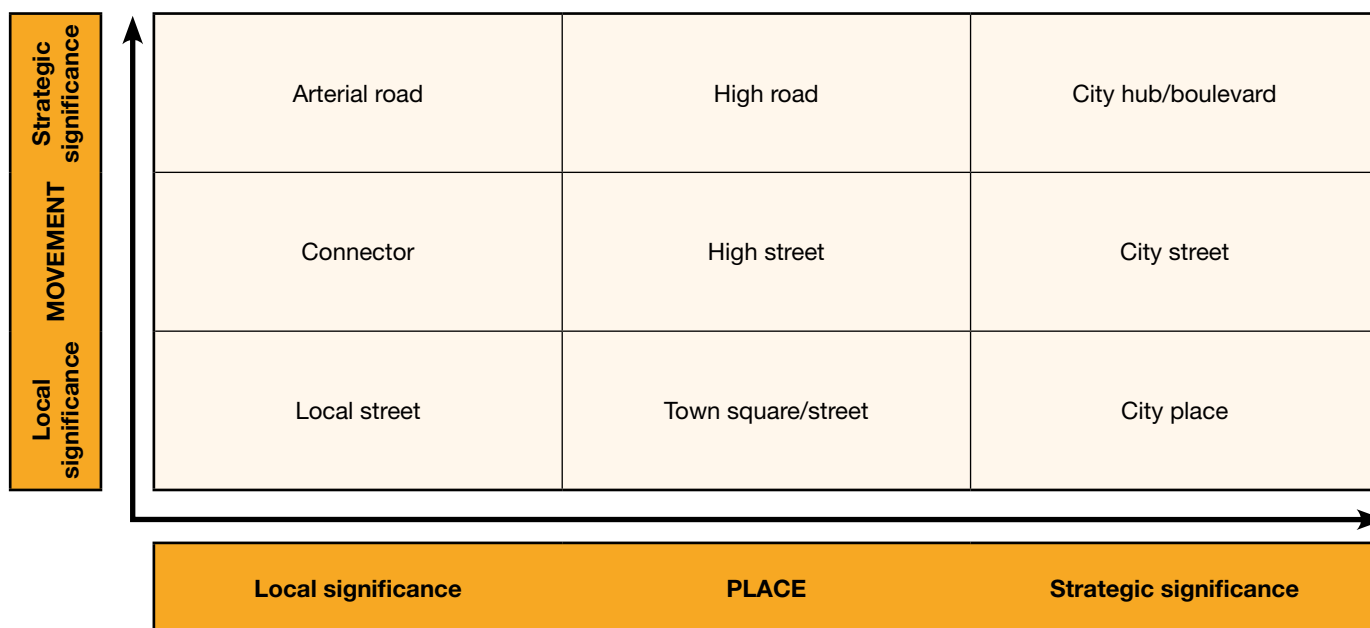
The Task Force recognizes the need for increased investment in London's streets and roads, both through supporting

place-making improvements in existing locations and providing for the needs of large scale new housing and job development, with an emphasis on place and low car dependence. It proposes a new way of categorizing street types to recognize and confront these tensions, involving a simple 3*3 'street family' matrix, as illustrated in Figure 1. This matrix recognizes the importance of traditional road hierarchies but adds a place (land use) hierarchy that is often absent in traffic engineering practice.

The Report highlights the inherent tensions between providing for better movement opportunities and better places. It recognizes that providing for place-making initiatives in locations towards the lower right parts of the diagram will be associated with traffic speed having a low priority and the needs of buses and active transport (pedestrians and cyclists) having high priority. However, network wide consequences of such provision for place should be recognised, backlog needs dealt with and future growth needs managed, if the wider network is not to become increasingly congested and less fit for purpose. Increased investment (including catering for growth in travel demand by more sustainable modes), smarter network operation (e.g. traffic signal improvements, parking management), demand management (e.g. changes in freight delivery times, information to travellers about travel choices, road tolling and extended road pricing), targeting congestion pinch points and such like are seen as important responses to ensuring that travel purposes that will continue to rely on roads, such as freight, are able to remain competitive. Increased investment in both place and movement is integral to the strategy, which is to be delivered in partnership between TfL, boroughs, and other stakeholders. This is an excellent example of balancing regional strategic considerations and local neighbourhood level considerations in integrated land use transport planning, through a partnering process. The Task Force argues that:

It is only in this way that all the aspirations – which are fundamental to the future competitiveness of London – can be met (RTF 2013, p. 151).

Figure 1: London Roads Task Force Street Family (Source: based on RTF 2013, Figure 19)



Local government has a vital role to play in working through the local/sub-regional/regional trade-offs that are involved in tackling the place versus movement challenge, a challenge that is increasingly confronting cities. It brings in issues such as public transport service standards, trunk and local, provisions to be made for active transport locally and sub-regionally, wider place making requirements (including the wider provision of social and community infrastructure), heritage issues, housing provision (including affordable housing) and such like. In short, it requires the kind of integrated thinking at local and sub-regional levels that is needed for strategic regional land use transport planning. An iterative approach through these levels seems likely to lead to the best answers for both, rather than an approach that is heavily top-down.

Similar kinds of regional/sub-regional and/or local trade-offs are involved in a number of important strategic land use planning issues, that have important transport implications, such as (for example):

- designation of knowledge clusters, other major activity centres and transit corridors, with associated target development densities (for centres/nodes and corridors)
- defining the kinds of land uses that should be expected in clusters/corridors of various scale (e.g. employment, educational, retail, recreational, entertainment, cultural, institutional, personal services, etc), consistent with the idea of developing 20 minute cities, and creating the conditions that are likely to support their achievement (e.g. local street networks designed for walking and land uses/place making to encourage same; supportive public transport service standards, discussed further below; links between development densities and public transport service levels and then links between public transport service levels and parking requirements in new developments, as apply in London; systemic provision for cycling throughout cities)
- providing for growth in employment and housing, including affordable housing, recognizing the importance of where there is a need to resolve issues of heritage protection
- deciding on an urban growth boundary and the conditions under which this will be managed
- meeting city-wide infill/Greenfield development targets (likely to be at least 70 per cent of population growth met by infill in our larger cities, which implies a higher proportion of infill dwelling completions because of the typically lower dwelling occupancy rates in infill areas), with minimum target densities for growth suburbs (which need to be of the order of 22-25 dwellings per hectare, on average, to progress development of the idea of 20 minute cities/neighbourhoods) and high quality design standards for infill at scale
- sequencing of urban growth to assure better alignment of infrastructure and service availability with development
- reducing GHG emissions across a wide range of sources, given that sustainable long term emission rates have been estimated at 0.33 tonnes per capita,

if global warming is to be limited to 2o C or below (Meinhausen et al. 2009). This requires per capita reductions of well over 90 per cent, which will need transformational change

- responding to environmental challenges that are associated with climate change, such as the heat island effect, which will be accentuated by increased densities, increased bushfires, storm surges, flooding, etc
- provision of open space and natural areas, at various scales (e.g. large and small areas of accessible open space)
- paying for infrastructure, services and policy requirements such as affordable housing. Rate capping constraints that have been imposed on some local authorities must come into question if there is to be a closer alignment between expenditure responsibilities of different levels of government and their revenue-raising capacities, a move that BIC's Policy Papers 3 and 6 have argued is desirable (and a direction in which the UK is currently moving).

A little elaboration on some of the key matters that need to be considered in relation to the main land use anchors included above is warranted. This is done in Section 4 for nodes, transit corridors, infill (built-up) areas and growth areas (greenfield developments), since there is a stronger local focus in this level of additional detail. The discussion in that Section, however, is largely strategic in orientation, to highlight the generality of what is being proposed. Local flavor will emerge in the detailing of particular implementation.

A local government position on such matters, developed at sub-regional/district level in partnership with state interests and wide community consultation, should help produce more enduring strategic development directions, with the MPA (or Regional Commission) a suitable vehicle for the relevant deliberations to be conducted. Answers should necessarily focus on points of decision-making principle, which go back to the goals of the strategic plan, and then deal with specific city-wide/sub-regional/local issues, such as those identified in the dot points, within the context set by the principles. Strategic planning guidelines would be a useful output from such processes. Target setting at regional, sub-regional and local levels, in terms of intended outcomes, is a transparent way to reflect the intended results of relevant deliberations and to make people accountable for performance. Those local authorities that are prepared to be most supportive of sub-regional and city-wide priorities should be recognised for their contributions, in ways such as supportive provision of infrastructure and services.

3.3 Strategic public transport planning

3.3.1 Linking public transport service levels to density

Of all the practical things that can be done to deliver more compact cities, integrated planning of land use and transport is fundamental, particularly as this relates to provision for public transport and active transport, especially walking. Cities like London, Vancouver, Toronto and Portland (Oregon) understand this very clearly and are well down the path of implementation at regional and local levels. Local government, at sub-regional and local levels, needs to be actively involved in conceiving how this integration is best performed and supporting delivery, at city-wide (regional), sub-regional and local levels. We explore some of the important issues that require such involvement if land use transport directions are to be sustained. City-wide and sub-regional/district level matters are considered in this Section, which essentially means matters to do with trunk public transport plus systemic issues associated with local public transport. Local level matters are the subject of Section 4.

In terms of trunk public transport, local government at sub-regional level needs to have a well-thought through view on priorities, in accord with strategic land use development intentions and with meeting existing and emerging travel requirements in a sustainable way. This will typically require turn up and go frequencies over an extended service span, with extensive on-road priority operation (for bus or light rail as applicable). Those strategic transit corridors that are singled out to carry a heavier urban infill load of mixed-use development should be a particularly important focus for investment, which should include corridors serving knowledge-based clusters and major activity centres. That investment will be a crucial influence on cluster/centre accessibility and on the resulting agglomeration opportunities.

Illustrative public transport service frequencies need to be linked to urban development densities. Such linkage has been illustrated in the Ontario Ministry of Transport's Transit-Supportive Guidelines (MTO 2012), as Table 1. The Guidelines emphasise that these are:

... suggested minimum density thresholds for areas within a 5-10 minute walk of transit capable of supporting different types and levels of transit service. The thresholds presented are a guide and not to be applied as standards. Other factors such as the design of streets and open spaces, building characteristics, levels of feeder service, travel time, range of densities across the network and mix of uses can also have a significant impact on transit ridership. Mobility hubs and major transit station areas may require higher minimum densities. (MTO 2012, p. 24)

In line with this thinking, the Ministerial Advisory Committee advising Victoria's Planning Minister on the state's long term planning strategy, of which the current author is a member, proposed minimum average densities in Melbourne's growth suburbs of 25 dwellings/ha. Densities of this order need to be embedded as average minima across outer growth (Greenfield) developments, a matter over which local government should take a firm supportive position. This then

helps argue the case for supportive base public transport service levels in the 20-30 minute frequency range. Some current bus service levels in fringe development areas are at hourly frequencies, or worse, which should no longer be considered acceptable. Dealing with service standards and delivery methods when densities are lower is discussed in Section 3.3.3.

3.3.2 Public transport service proximity

Public transport service frequencies are one important matter over which local government at city-wide, sub-regional and local levels should have a view. They should also have a view on proximity, or the proportion of the population in an area that can readily access these services because they are close to home. The usual benchmark is that communities should be planned such that at least 90 per cent of all people/jobs are within a 400 metre (or 5 minutes) walk of a public transport stop, or 800 metres of a high frequency/speed service. If the 800 metres distance is in place for a high frequency/speed service, this should generally be supported by more proximate service at a lower frequency.

The very valuable Western Australia Guidelines for preparation of integrated transport plans (WAPC 2012) make the point that many Australians are prepared to walk more than 400/800 metres to access public transport. However, this is more likely to be a reflection of the poor local availability of public transport services rather than being a measure of willingness-to-walk by choice. As noted in Section 2, Ewing and Cervero (2010), found that halving the distance to the nearest transit stop is associated with a 29 per cent increase in trips. Some people may certainly be prepared to walk more than 400/800 metres but this does not mean that this is an acceptable norm and it should not lead to a lengthening of the usual target access distances, subject to achieving acceptable development densities. Public transport use, and the societal benefits this creates, will be higher if people usually do not have to walk further than these distances. Also, those people who are least able to walk longer distances will be increasingly disadvantaged if required to walk greater distances to access public transport.

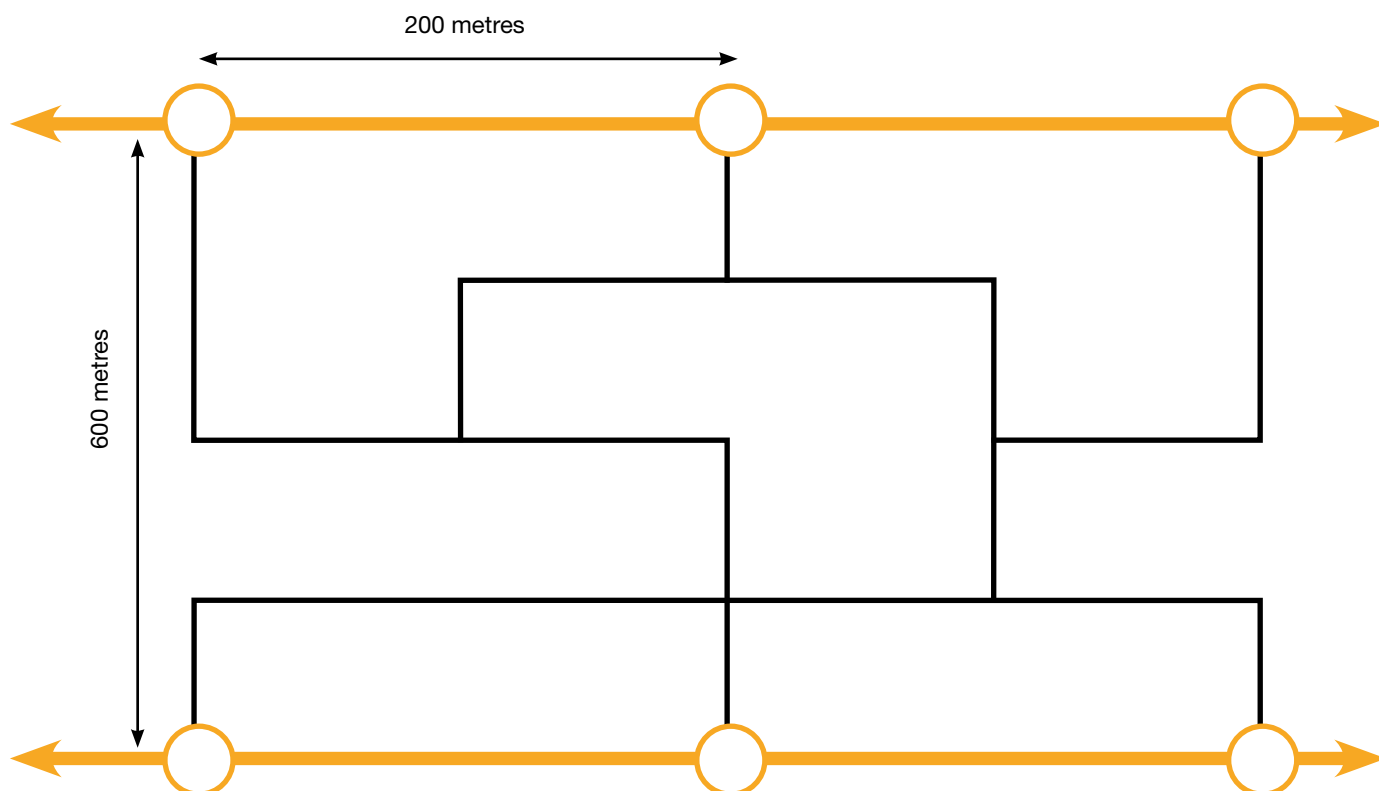
In local design terms, arterial and collector road layouts need to be arranged to support these walking access standards, particularly the 400 metre standard. Assuming bus stops are 200 metres apart along parallel collector roads, an implication is that these collectors should be no further than 600 metres apart, with local access roads/cycleways/footpaths from dwellings to the collectors spaced less than 200 metres apart (Figure 2). Local government should work to support such access standards, with the supportive minimum densities in growth suburbs, and advocate strongly for at least the minimum indicated complementary public transport service levels.

Table 1: Suggested density thresholds for transit service

Transit service type	Suggested minimum density
Basic transit service (one bus every 20-30 minutes)	22 units per ha
Frequent transit service (one bus every 10-15 minutes)	37 units per ha
Very frequent bus service (one bus every 5 minutes with potential for BRT or LRT)	45 units per ha
Dedicated Rapid Transit (LRT/BRT)	72 units per ha
Subway	90 units per ha

Source: MTO (2012), p. 24.

Figure 2: Designing walk-accessible bus routes



Frequent public transport services are of little value if they are continually stuck in congested traffic. On-road priority for road-based public transport should be the norm for trunk services joining major clusters/activity centres to the central city, to each other, to major urban infill locations and to growth suburbs, seeking to achieve trip times that are competitive with the private car. This provides a backbone network that can support a more productive and inclusive city, with a lower environmental footprint. In terms of Figure 1, these routes will rate high on the movement axis, the degree of significance on the place axis depending on the nature of the route in question. The movement/place trade-offs involved in such decisions reinforce the importance of local government being at the decision-making table, for strategic city-wide and sub-regional/district level decisions.

3.3.3 Public transport service provision in low demand settings

The idea of the 20 minute city implies local bus service frequencies in the 20-30 minutes range, with supportive densities (argued in Section 3.2.1 to be a minimum of about 22-25 dwellings per hectare). In many existing outer suburban areas and in many regional settings, population numbers and/or densities may be so low (e.g. 10 dwellings per hectare) that it is very difficult to achieve reasonable boarding levels on a network of local public transport services (which will usually be bus services). The BIC's Policy Paper 4 discussed service delivery options in such a setting, recognizing the importance to move to suitable minimum densities as soon as practicable. That discussion is summarised here because of the major role that the BIC sees for local government in resolving this matter.

Stanley and Hensher (2011) have argued that a minimum boarding rate of about 7-8 passengers per hour is sufficient to economically justify a local urban route bus service, based primarily on the quantified social inclusion benefits from the service. This can be considered in multiples. Thus, for example, if an hourly service attracts 7-8 or more boardings per hour, this meets the target. If two 30 minute frequency

services each meet the target, then a 30 minute service would be justified, as expected with densities in the 22-25dw/ha plus range. Individual services can be subjected to this test. If a service fails to meet the benchmark boarding rate, for reasons such as densities being too low, options include:

- replacing it with a lower cost service (such as smaller buses or taxis)
- continuing it, particularly if deleting the service would lower boarding rates on other services along the route.

Smaller buses

Capital costs of route buses typically account for about one quarter of total costs. Smaller buses have lower capital costs and, prima facie, might be expected to reduce total service delivery costs. The BIC's Policy Paper 4 explored this issue, looking at international experience, and concluded that opportunities for downsizing buses are likely to be minimal. UK deregulation, for example, led to an influx of smaller vehicles, most of which have since disappeared, being replaced by larger vehicles on successful routes and removed completely on poorly patronised routes (Chris Nash, personal communication).

Demand responsive/flexible services

Demand responsive and flexible transit services are advocated by some analysts in low volume settings. Various evaluations of such schemes have been undertaken and they typically reflect the inherently costly nature of more closely aligning service provision with the requirements of individual clients. Labour primarily drives the cost of various forms of public transport service, because it is the largest cost component. The key to providing cost-effective public transport services in a low patronage setting is thus labour cost, not vehicle cost.



Social enterprise model: ConnectU

BusVic research in Warrnambool (Stanley and Stanley 2004) showed substantial unmet travel demand from people largely unable to use public transport and without other means of transport. At the same time, that there was a range of underutilised transport assets in the community, particularly community buses and cars. ConnectU, a local social enterprise, commenced providing transport service in October 2012 as a local initiative in response to this research, supported by BusVic, the Bus Industry Confederation and Warrnambool Bus Lines. To deal with the labour cost problem, ConnectU uses volunteers to provide most of the transport service. It achieved patronage growth of a staggering 17.5% per month compound over its first two years of operation but lack of resources has constrained further growth. The BIC's Policy Paper 4 showed that the service is a cost-effective form of community transport, which provides a solution for transport disadvantaged people who are unable to use route services. It could take on a larger role, with suitable resourcing, co-ordinating across route, school, community and other local transport needs, which would enable costs to be reduced. Delivering such an outcome primarily depends on achieving:

- strong community support at the local level, for asset pooling, service integration and use
- state government encouragement for service integration
- changes in federal funding arrangements, to support co-ordinated local transport needs facilitation, rather than more narrowly focused transport funding (through, for example, HACC programs).

This general approach to service provision in low volume settings is consistent with conclusions reached by the UK House of Commons Transport Committee in its recent report on Passenger transport in isolated communities. That Committee concluded:

'Total transport' involves pooling transport resources to deliver a range of services. For example, it might involve combining hospital transport with local bus services. That new approach could revolutionise transport provision in isolated communities by making more efficient use of existing resources. We recommend that the DfT initiates a large-scale pilot to test the concept in practice. (UK House of Commons Transport Committee p. 3).

A similar approach has been proposed by the Ontario Ministry of Transport:

All public transportation services within a community should be coordinated to expand or provide more efficient transit service. This can include coordination between conventional or specialised agencies; long term care agencies; social service agencies; hospitals, ambulance and patient transfer operators; school boards and school bus companies; intercity bus companies; taxi operators; and volunteer groups.

The level of coordination between agencies should be tailored to local conditions, and can include shared information or referral, joint acquisition and sharing of supplies and services, use of excess capacity, joint use of resources, and centralised services for intake and dispatch. (MTO 2012, p. 105).

The local coordination function should be performed by the entity best placed to do this in any local context. Having local government as a champion is a cornerstone for success, with the range of ways this can be manifest with support for the program.



4. Local government local role

4.1 Scope

Section 3 considered strategic land use transport planning matters in which local government should have an important role, usually working through a sub-regional or district level entity of local authorities. Most of the matters in question are regional framework type issues, which set the context and direction for policy/planning behaviour at individual local authority level, sometimes in accordance with associated guidelines (that may be developed in partnership between the state and local government acting sub-regionally) or even in accord with legislative requirements that set down required behaviours/responses. Section 4 looks at major local authority response areas, both in accord with matters where regional/sub-regional directions are developed and also in matters where there is extensive local discretion. Examples are used, rather than attempting to be exhaustive in scope, partly using the broad land use types and public transport focus from Section 2 but with a bigger focus on local place making.

4.2 Neighbourhoods

Section 2, and BIC's Policy Paper 4, talked about the important role neighbourhoods play in the pursuit of social inclusion, individual wellbeing and strong communities. Local government has a vital role to help foster well functioning neighbourhoods, which can be approached through the lens of the 20 minute city/neighbourhood, the essence of which is seeking to ensure that most of the activities people need for a good life are accessible within 20 minutes of where they live by walking, cycling or public transport. At a local level, individual councils should seek to influence the location of key services and other community activities, and of local public transport and active transport opportunities, in ways that maximise the prospects of achieving the 20 minute benchmarks across their citizens. This includes, for example:

- ensuring that street and roundabout designs (lane widths, swept paths) permit buses to travel through neighbourhoods in a way that provides easy walking access by residents/visitors (in line with distance benchmarks discussed in Section 3)
- ensuring that there is safe and convenient universal access to local bus stops (e.g. including smooth durable, non-slip footpaths, suited for walking/movement by all age groups and abilities; with some shelter along the way - e.g. verandahs and/or shade trees for hot/rainy days; together with good lighting and occasional seating opportunities; safe on and off-road bike paths, with storage facilities at major bus stops)
- working with other responsible authorities on place-making initiatives to ensure that bus stops are welcoming (the large majority having weather-protection, seats with arm rests, customer information and being free of graffiti/other vandalism)

- providing opportunities for shopping and other such activities at many stops, including supporting co-location of activities to increase usage, in environments that invite walking and exploring the local area (place-making focus)
- providing traffic speed limits that encourage walking and cycling within the neighbourhood, including for access to the local activity centre (node) and to trunk public transport
- integrating open space planning, including for urban forests, within the neighbourhood level planning approach and linking this with opportunities for transit access and
- working with local communities on tasks such as those above to find the most suitable local solutions, building stronger communities and social capital in the process.

4.3 Nodes

These are areas usually characterised by clusters of concentrated mixed-use activity, with higher densities than the surrounding area. They range from central business districts at one end to small local activity centres and include major hubs, such as tertiary institutes and hospitals. The few knowledge-based clusters proposed for the middle urban parts of our cities are a particular (high end) type of such nodes. The destination activity density associated with nodes is an important driver of public transport use. Key land use planning considerations that local government should consider in relation to nodes include:

- ensuring that nodes have a full range of uses (depending on scale) and making them focal points for mixed-use intensive growth, within a hierarchical structure, because of the agglomeration, environmental and social benefits associated therewith
- integrating public transport development with nodal development, in terms of issues such as stop/station accessibility (e.g. local street network connectivity, where intersection densities of 0.6 intersections per hectare or higher are recognised as suited for walkable nodes and corridors – see MTO 2012 p. 40), activity availability at stops/stations, protecting opportunities for parking space to be converted to transit-friendly higher density mixed-use development, timed transfers between public transport services (which may require local advocacy for achievement, given relevant authority responsibilities), quality modal interchange facilities (including out-of-weather waiting areas and safe walking routes) and attention to place-making around stops, starting with the more important stops. Some of these matters could be part of negotiations over permit approvals, for new or re-developed facilities, such as big box retail or major shopping centres
- planning for nodal boundaries to generally be within 800m walking distance from the centre (see Section 3.3.2) and providing safe walking routes, which will be easiest where block lengths are short and

pedestrian paths or mid-block connections are used in areas with longer block lengths

- limiting the availability of parking opportunities, particularly on-street parking, and ensuring that parking is priced, to discourage car use and congestion-creating circulation looking for vacant spaces (setting parking prices to achieve about 85% occupancy rates is an effective way to deal with the problem of circulation)
- affordable housing and social/community infrastructure provision should be included, the former probably requiring incentive measures to be provided (e.g. density bonuses; fast approval processes).

4.4 Transit Corridors

For the purposes of this Policy Paper, transit corridors are areas adjacent to trunk public transport routes that link the major nodes within an urban area or which the private development market has 'chosen' as suitable for higher density development, extending 400-800 metres laterally from those routes, depending on the public transport service level (faster trunk services are consistent with longer walk distances). The corridors should include a mix of land uses and the Vancouver experience shows that they are major opportunity areas for accommodating urban growth in an efficient manner, by corridor infill, as discussed in BIC's Policy Paper 5. Key land use considerations for local authorities in relation to transit corridors include the following:

- transit corridors should be identified and formally included in a city's strategic land use transport plan and in the relevant local authority plans, with target development densities specified and achievement dates, depending on the significance of the particular corridors
- such corridors will typically be along arterial roads, which means a focus on resolving competing demands for use, as reflected in Figure 1 previously. Consultative approaches such as 'complete streets'² are suited to working through these competing demands, with a general presumption in favour of supporting public transport and active transport, because of the multiple benefits associated therewith, but providing for necessary road freight movements and road use by those with little alternative. The application of such approaches has been used in cities like New York and City of Melbourne to generate pop-up spaces from reclaimed road space. Selective designation of transit corridors should then aim to allow operation of frequent trunk public transport services at competitive speeds
- nodes should be planned where transit corridors intersect and these should have a focus on mixed-use intensification, as noted in Section 4.3

- corridors should include a full range of main street type uses, such as retail, cultural, personal services, institutional, office, active and passive recreation (places to sit and observe), together with residential, and permeability along the building line should be high (i.e. an absence of barrier effects along the building line), to encourage walkability and associated public transport use
- densities and building types along the corridor should integrate with the scale and intensity of the local neighbourhoods and development should encourage greater integration between areas on both sides of the trunk public transport route, rather than forming a barrier to interaction (requiring specific local initiatives for achievement)
- provision for affordable housing and social/community infrastructure should be included.

Transit supportive layouts

The layout and orientation of buildings should help to support the creation of pedestrian-friendly streets and open spaces designed to enhance activity around, and connections to, stops and station areas.

The act of locating higher-density development and uses adjacent to a transit stop does not always equate to transit-supportive development. To be transit supportive, new developments and existing communities should treat transit as a central organizing element and aim to increase ridership by orienting buildings so that activity is focused on streets and open spaces in and around transit stops and station areas. Transit-supportive development should support a high level of walking and cycling and help to strengthen connections between transit facilities and surrounding areas (MTO 2012, p. 72)

² See, for example, the Smart Growth America website on this subject, at <http://www.smartgrowthamerica.org/complete-streets/complete-streets-fundamentals/complete-streets-faq>, accessed 7 April, 2016.

4.5 Other built-up areas

We refer here to existing parts of the built up urban area that are not nodes or transit corridors, which will constitute, by far, the major part of the urban area. The majority of such areas need not change with growth in the urban area, provided successful nodal and corridor growth strategies are implemented. Where growth in 'other built-up areas' should be largely focused is in larger scale brownfield areas (e.g. old industrial sites, some of which may need de-contamination) and greyfield locations (e.g. where much housing is in need of renewal), and there is also scattered infill taking place through measures such as provision of second units on a block, which needs to happen in a sensitive manner. In larger scale infill, key land use matters to consider include:

- protecting the large part of the existing urban area that is not subject to significant change
- using transit-supportive principles of built-form and land use (e.g. densities, local street and block networks, activity centres located on public transport routes) in designing the infill area
- inclusion of high quality walking and cycling facilities
- provision for affordable housing.

4.6 Growth Areas

These are Greenfield locations, usually on the fringe of existing built-up areas, although sometimes not contiguous with the latter; such 'leap-frog development' is prima facie, undesirable in terms of adding to the many problems of urban sprawl, including servicing difficulties. Growth area development should preferably be contiguous with existing development and framed around delivery of 20 minute neighbourhoods. It should account for only a small proportion of total growth in a city or regional town, infill being the dominant means of catering for such growth. Land use planning should:

- seek contiguous growth area development (contiguous with the existing built-up area) at minimum average net densities of about 22-25 dwellings per hectare, within the established urban boundary
- ensure that a wide range of infrastructure and services accompanies development, rather than lagging behind, and that the growth node is mixed use, with extensive use of co-location of community facilities, in line with 20 minute neighbourhood thinking
- provide local public transport services with a 30 minute service frequency (or better) over at least 15 hours/day, with 90 per cent of all dwellings being within a 400m walk of a stop and with service provision sufficiently early in the development cycle to substantially reduce the need for multiple cars per dwelling
- provide safe walking routes to/from bus stops, well lit stops, with shelter and seating at as many stops as feasible (e.g. perhaps linked to co-location with some small shared public spaces).

4.7 Other supportive initiatives

4.7.1 Car parking

Car parking is a particularly important lever for local government in relation to land use transport. Two aspects are considered here, with connections between the two: provision for parking spaces for car sharing schemes and parking requirements for new medium/higher density developments.

Car sharing needs little explanation, being a relatively recent and highly visible addition to mobility options. Writing in *The Conversation* in 2014, Kent and Dowling referred to a prediction that one in ten Sydney households in 2016 would be a member of a car sharing organisation (Kent and Dowling 2014). The Royal Automobile Club (RAC) of Western Australia undertook market research into the role of car sharing and listed the following locational characteristics as supportive:

- *higher population density to ensure a reasonable number of potential customers within a walkable catchment of a car sharing vehicle;*
- *mix of land uses to increase the type (e.g. residents, businesses and students) and thus the number of potential users thereby maximising the utilisation of each vehicle. Having access to a range of local services and amenities may also reduce the need for car ownership;*
- *parking pressure, restrictions or controls which limit the availability of parking for general use of which make it expensive to park;*
- *good alternative transport options (both in terms of access to public transport or opportunities for active travel) – integration of car sharing and public transport helps increase membership and utilisation; and*
- *lower levels of car ownership and usage suggests less dependency on the car*
- *redeveloped neighbourhoods and precincts, city living and new developments all offer good opportunities for successful services. (RAC undated, p. 4).*

The land use transport context summarised in these locational characteristics is that being proposed in the strategic directions in this Policy Paper and in Australian capital city strategic land use transport plans and some local authorities are already responding in a proactive way. For example, City of Port Phillip in Melbourne's inner south-east has recently proposed increasing the number of car share parking places in the City from 79 to 330, expecting that each new share car will remove 10 vehicles from the road (Carey 2016). This car-removal rate is supported by conclusions from 2011 research reported by academics at University of California, Berkeley (Martin and Shaheen 2011), who also found that North American car sharing households in 2008 owned an average of 0.47 vehicles per household before joining the car share scheme but that this halved to 0.24 after membership. Vehicle age reduced and fuel use decreased.

Other research suggests that car sharers are public transport users. In short, facilitating increased car sharing reduces congestion pressure on road systems, reduces greenhouse gas emissions and increases public transport use, supporting moves to more compact settlement patterns. Local governments can play lead roles in facilitating faster spread of car sharing by increasing the availability of well located parking spaces, in preference to open-access places.

The second car parking issue concerns the requirements for parking provision in new/renewed developments, particularly in areas undergoing densification. These areas should be located where public transport service availability is of good quality, or can readily be made so, such as along the transit corridors discussed in Section 4.4. These areas have limited road space available and public and active transport will need to be the major means of catering for additional travel that is associated with densification (at the rate of about 4 trips/person/day). The City of Port Phillip, cited above, by way of example, has set an ambitious and commendable goal of no growth in car ownership as an additional 100,000 population is added in coming years. Tight limits on parking requirements in new residential/mixed-use developments will be needed to support achievement. In infill areas like this, there should be a prima facie expectation of low parking requirements in new residential developments, relative to bedroom numbers, and in mixed-use areas, with these requirements specifying maximum numbers, not minimum, with encouragement for little or no car parking (but provision for bicycle parking) in ideally located developments, such as at train and BRT stops, or only requirements for on-site parking of a small number of share vehicles. This obviously has implications for competition for on-street parking in the area, which should be able to be handled by judicious provision of a limited number of paid parking permits to existing residents.

London has developed a set of PTAL (public transport accessibility levels)/density thresholds, which largely determine the amount of development that can take place on a site/area. It also has PTAL/parking standards, which link the requirement for car parking provision to public transport service availability. Australian cities should develop similar benchmarks, as a basis for stable and predictable decisions on parking requirements (and on where public transport service levels might need to be increased, with developer financial assistance, if a proposed development would breach the applicable PTAL/density threshold).

Local government is literally in the driving seat in terms of some of the key parking requirements at a local level, to support implementation of transit-friendly urban intensification. State planning requirements typically set overarching requirements and planning tribunals can intervene to limit progressive developments but the establishment of updated guidelines linking density, public transport service levels and parking requirements, developed in partnership between local government, state/territory governments, the development industry and planning professionals, should be a priority. Local government should have more freedom to set the pace in terms of local transit-friendly development, through means such as reducing car parking availability and reorienting such availability more towards car-share vehicles.

4.7.2 Council buses

It is common for local councils to have their own vehicle and make these available for a range of community uses. The BIC believes that more cost-effective local mobility solutions will result when any such vehicles are rolled in to a broader local mobility management program, such as ConnectU (discussed in Section 3.3.3), where the aim is to serve a wide range of needs using as many existing public/community/school bus etc resources (including vehicles) as possible. Council volunteers are also a valuable resource to support such schemes. Warrnambool City is a strong supporter of ConnectU in volunteer and vehicle terms. Other councils should explore similar local models.

5. Resources/funding

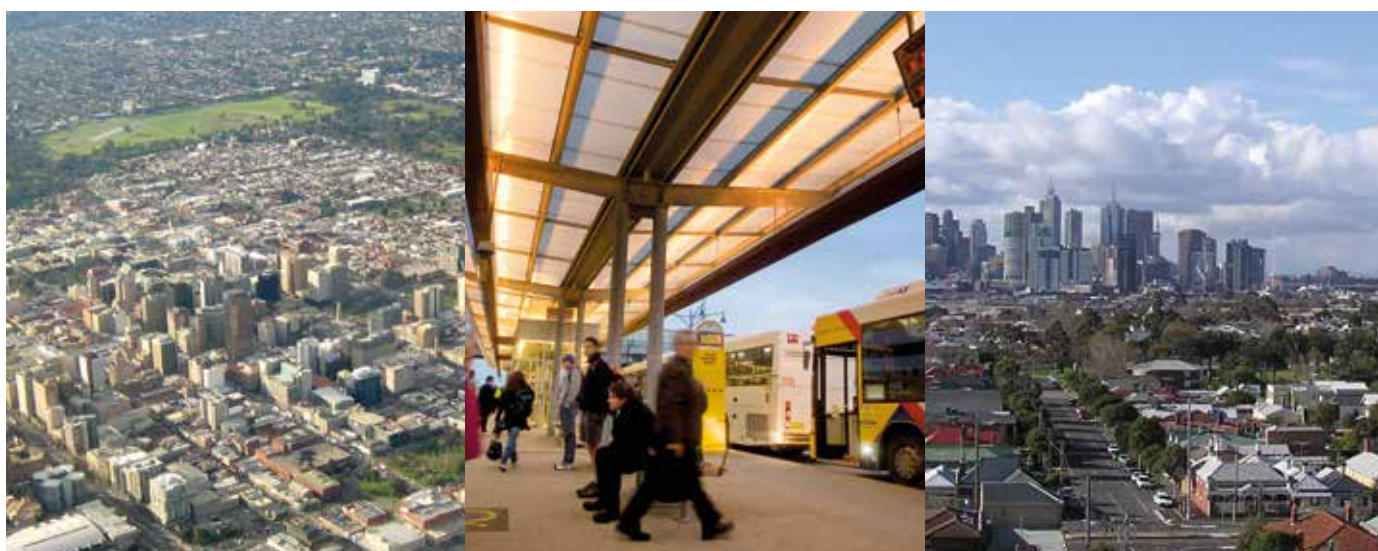
If local councils are to play a larger role regionally, sub-regionally and locally, in terms of delivering more sustainable cities and regions, where there is a focus on developing more compact settlement patterns, then they need the resources and financial capacity to perform this role. In terms of resourcing, arguably there are too many local authorities in some Australian cities. City of Brisbane is itself a million in size, accounting for half the population of the Greater Brisbane Area. Average LGA (local government area) populations in Melbourne and Sydney are about 120,000-130,000, whereas those in Perth and Adelaide are half this, or less, and Hobart about 30 per cent of this number. The WA Government tried unsuccessfully to (about) halve the number of councils in Perth in recent times. If local government is to play a bigger role in our cities, then the question of the scale of individual LGAs needs to be examined, to see whether they are efficient and effective. Closeness to the people argues for small scale but efficient service provision and access to skilled resources goes the other way. Local and state governments need to ensure that local councils are scaled in such a way that enable them to perform at regional, sub-regional and local scale in the most cost-effective way.

Leaving aside the question of scale, the capacity to raise revenue is an important constraint on what local government can do. There is an international trend for cities to seek greater access to the financial means to better implement their wide range of responsibilities. At local level, rate capping constraints are sometimes applied by state governments, to limit the rate at which local authorities can raise rates, the main revenue stream under their own control, to fund services and infrastructure. Given that local councils are accountable elected organisations, this seems an unnecessary restriction on local decision making.

In terms of paying for infrastructure and services needed to support urban intensification more broadly, councils across different Australian states/cities have varying levels of opportunity to charge development contributions, to help meet costs directly associated with providing infrastructure required to cater for population growth (in particular). NSW provisions allow LGAs to levy the highest contribution rate, subject to an appropriate infrastructure development plan, but these are capped at \$20,000 per additional dwelling.

LGAs in other cities have much less opportunity in this regard and, in some cases, have very little revenue-raising capacity related to their additional infrastructure costs (broadly interpreted) associated with urban intensification.

Local councils need to be able to levy development charges to help fund social and community infrastructure that is attributable to catering for greater population and activity levels, particularly in urban infill (greenfields arrangements are usually better). State regulations should ensure that this opportunity is available, linked to council infrastructure and servicing plans that justify the level of costs, and associated charges, involved. Determination of the appropriate proportions of costs to be recovered through such charging, should be negotiated between the state government and LGA at industry level within a state, in consultation with the development sector and the Planning Institute of Australia. There should also be an opportunity for state and local governments to each share part of any value increases created by urban intensification, if the capital value of these gains is expected to substantially exceed the attributable costs of infrastructure service provision that is charged through development contributions.



6. Conclusions

State and federal government roles have been important discussion points in the BIC's seven preceding Policy Papers in this Moving People - Solutions for Policy Thinkers series but local government's role has received less attention. This Policy Paper narrows this gap by examining ways in which local government can support the major development directions for our cities and regions and be recognised as a vital partner in so doing. It does not seek to cover all bases in these areas but focuses mainly on matters associated with land use transport integration.

This Policy Paper started by noting the broad commonality of goals set for strategic land use transport plans for our cities, in particular, and then argued for the primacy of setting land use directions before finalizing transport plans. More compact development patterns are common ground for cities and regions in this regard, with 20 minute cities or neighbourhoods being a key building block, drawing on the analysis of BIC's Policy Paper 4. The importance of the neighbourhood focus is one important reason for a bigger local government role in land use transport planning and delivery.

Strategic land use development directions for our cities were summarised as being anchored by:

- the CBD and close surrounds
- a small number of high tech/knowledge-based clusters
- major urban renewal opportunity areas
- major transport corridors that link the core nodes to the centre, to each other and to outer areas and tie in the renewal opportunity areas and
- a series of constituent 20 minute cities/ neighbourhoods.

Supportive strategic transport development directions have been outlined.

This Policy Paper argues that governance arrangements are vital determinants of the capacity to prepare and implement

long term land use transport plans, an area in which Australian performance has been poor. Our 'long term' is typically very short, with integrated land use transport plans frequently surviving no longer than the government that developed them. A much stronger partnership between state governments and local government at sub-regional level is seen as a way to strengthen the quality and longevity of integrated land use transport plans, drawing on experience from cities such as Vancouver. For example, conflicts between place making and movement, in particular, are endemic in land use transport planning. Local government at sub-regional level should be a lead actor in resolving such conflicts, as part of its contribution towards city-wide planning. A state/sub-regional local government partnership for integrated land use transport planning should help to de-politicize our planning processes. The Greater Sydney Commission is a welcome initiative in this regard.

In terms of strategic transport thinking, local government at sub-regional level needs to have a well-thought through view on issues such as public transport service priorities, in accord with strategic land use development intentions and with meeting existing and emerging travel requirements in a sustainable way. This links closely with many matters of high importance for local government, such as supportive urban development densities and urban design standards for walkable, transit accessible communities. In low density areas, local governments have an important role to play supporting local stakeholder involvement around transport needs identification and improved utilisation of existing transport resources, including volunteers.

Within the general approach to urban development proposed in this Policy Paper, based around a polycentric city plus 20 minute neighbourhoods, with local nodes and transit corridors, local government has a key role to play in planning for, and delivering, all key land use elements. This extends to important 'local' issues such as car parking requirements that need to be supportive of more compact settlement patterns.

If local government is to play a stronger role in integrated land use transport planning, it needs the resources and financial capacity to do so. In some cases this may be assisted by amalgamation of small municipalities into larger entities. Importantly, it needs a sufficient level of control over revenue flows to be accountable for performance.



References

- Australian Davos Connection (2010), ADC Cities Report: Enhancing Liveability, Melbourne: ADC Forum.
- Carey, A (2016), 'More share parks favour the carless', *The Age*, Friday 8th April, p. 7.
- 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.
- Ewing, R. and R. Cervero (2010), 'Travel and the built environment', *Journal of the American Planning Association* 76(3): 265-294.
- Haas. T. (Ed.) (2008), *New urbanism and beyond: Designing cities for the future*, New York: Rizzoli.
- Jacobs, J. (1961), *The Death and Life of Great American Cities*, New York: Random House.
- Kent, J and R. Dowling (2014), '1000 cars and no garage – why car-sharing works', *The Conversation*, October 16, accessed 8 April 2016 at <http://theconversation.com/1-000-cars-and-no-garage-why-car-sharing-works-31179>
- Martin, E and S. Shaheen (2011), 'The impact of carsharing on household vehicle ownership', *Access 39*, Spring, accessed 8 April at http://www.accessmagazine.org/wp-content/uploads/sites/7/2016/01/access38_carsharing_ownership.pdf
- Mayor of London (2015), *The London Plan: Spatial Development Strategy for Greater London, Consolidated with Alterations Since 2011*, London: Greater London Authority.
- Meinshausen, M, N. Meinshausen, W. Hare, S. Raper, K. Frieler, R. Knutti, D. Frame and M. Allen (2009), 'Greenhouse-gas emission targets for limiting global warming to 2°C', *Nature*, 458, 1158-1162.
- Ministry of Transport Ontario (2012). *Transit Supportive Guidelines*. Ministry of Transportation. Government of Ontario.
- Royal Automobile Club WA (undated), *Exploring the role of car sharing in Perth*, accessed 8 April 2016 at http://rac.com.au/cs/idcplg?IdcService=GET_FILE&dDocName=RACSTG061758&allowInterrupt=1&RevisionSelectionMethod=LatestReleased&noSaveAs=1
- Roads Task Force (2013), *The vision and direction for London's streets and roads: Roads Task Force – Executive summary*, March, accessed 24 February 2016 at <http://content.tfl.gov.uk/rtf-report-executive-summary.pdf>.
- Stanley, J and D. Hensher (2011), 'Economic modelling', in G. Currie (Ed.) *New perspectives and methods in Transport and Social Exclusion Research*. Bingley, UK: Emerald.
- Stanley, J and J. Stanley (2004), *Improving public transport to meet community needs: A Warrnambool Case Study*, Melbourne: Bus Association Victoria.
- Stanley, J., J. Stanley and S. Davis (2015), 'Connecting neighbourhoods: The 20 minute city', *Bus and Coach Industry Policy Paper 4*, Canberra; Bus Industry Confederation.
- Stanley, J., J. Stanley and R. Hansen (forthcoming), *How great cities happen: Integrating people, land use and transport*, Cheltenham UK: Edward Elgar.
- UK House of Commons Transport Committee (2014). *Passenger transport in isolated communities*. <http://www.publications.parliament.uk/pa/cm201415/cmselect/cmtran/288/288.pdf>. Viewed 7th August 2014.
- Western Australian Planning Commission (2012), *Guidelines for preparation of integrated transport plans*, May, Perth: Western Australian Planning Commission.

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