Our Cities - building a productive, sustainable and liveable future

Bus Industry Confederation Response

February 2011

Contents

1. Context 3
2. Targets 4
3. Closing the Strategic/Local Aspirations Gap on Density 6
4. Responses to Specific Questions in Our Cities 7
5. Concluding Comment 33
References 34

1. Context

Following publication of its valuable overview report on the *State of Australian Cities 2010* (Australian Government 2010a), the Australian Government has now released a Discussion Paper that suggests a range of possible responses to the issues raised in that report. That Discussion Paper, *Our Cities – building a productive, sustainable and liveable future* (Australian Government 2010b) invites responses from interested individuals and organisations. This paper sets out the views of Australia's Bus Industry Confederation's (BIC) on matters raised in the report and on related pertinent issues.

The Bus Industry Confederation (BIC) is Australia's peak representative body for Australia's bus and coach industry, including bus and coach operators and suppliers to the Industry.

BIC has been a significant contributor to Australian national transport policy discussion for many years, primarily land transport policy. However, BIC has also been actively involved in policy research and development concerning our cities, recognising the close connections between land use and transport. BIC's research in areas such as transport and greenhouse gas emissions and transport and social exclusion, in particular, is internationally recognised and is central to the purposes of *Our Cities*. We draw on that research in this paper.

In shaping this response, we have chosen to react to the particular questions posed at pages 58-60 of the Discussion Paper. We do so against the background of two publications which are referenced in the Discussion Paper, which set out BIC's views in a more comprehensive manner.

- *Moving People, Solutions for a growing Australia*, a report that sets out the views of BIC and two partner organisations on national land transport policy, includes a vast array of material relevant to future directions for land transport in our cities.
- The *ADC Cities Report: Enhancing Liveability,* for which the BIC Senior Research Fellow at The University of Sydney, Professor John Stanley, was lead co-author, reflects BIC views on many of the key issues raised in *Our Cities*.

We draw extensively on the thinking in both of these two documents in this response.

Before responding to the various individual questions posed in the Discussion Paper, BIC draws attention to two critical issues that emerged in the ADC Cities Summit and which are considered in the *Integrating the City* chapter of that report. Those two issues are central to policy responses to many of the issues raised in Our Cities. The two issues are:

1. the vital importance of target setting for national urban policy; and
2. the gap between governments' intended strategic policy directions for our cities and local aspirations in many locations, a gap that must be closed to resolve many of our cities' problems.

These are over-arching issues whose resolution will be central to determining what can be achieved to enhance the productivity, sustainability and liveability of our cities. Section 2 of this submission presents BIC's views on target setting. Section 3 sets out our views on the strategic/local divide. Section 4 sets out our responses to the specific questions posed in *Our Cities,* while Section 5 presents a short concluding comment.

2. Targets

The *State of Australian Cities 2010* was refreshingly frank in pointing to the high but declining liveability rankings of Australian capital cities. The liveability of our capital cities is fundamental to "brand Australia" and declining liveability rankings are an extremely worrying development, in a world where knowledge intensive activities are key growth drivers and liveability is a major attractor of talent in these sectors.

The current COAG Capital Cities Planning process review is a positive way to focus attention on more integrated planning systems for our cities. However, the performance criteria set forth for that review are very much **process focused**. BIC strongly believes that, for these processes to be able to meet the COAG national objective (*To ensure Australian cities are globally competitive, productive, sustainable, liveable and socially inclusive and are well placed to meet future challenges and growth,* quoted in Australian Government 2010b, p. 61), they need to be extended to encompass **outcome objectives**, the achievement of which will provide greater assurance that the relevant strategic plans will ensure Australian cities are globally competitive, productive, sustainable and liveable (including being socially inclusive).

Outcome objectives provide key elements of transparency and accountability for performance that are absent in process criteria. The inclusion of outcome criteria that cover all three goal areas (productive, sustainable, liveable) will highlight the vital importance of an integrated approach being taken to plan development and add performance pressure on governments to take responsibility for real achievement. BIC strongly supports the set of outcome criteria for Australian capital cities proposed in the ADC Cities Summit report (ADC 2010). Those criteria, set out in Table 3 of the ADC report, are repeated in Table 1 below. The table indicates the particular outcome or goal area to which each specific target is directed.

Adoption of targets along such lines will take the COAG capital city planning process exercise from one where the real risk of domination by a "tick and flick" mentality on the part of those responsible for delivery is replaced by a focus on real outcome achievement, against which governments and their staff can be judged.

Given BIC's particular interests in land transport, we draw attention to the 3rd productivity target and 1st and 6th liveability targets. With respect to the 3rd productivity target (*10 percentage point increase in mode share for walking, cycling and public transport by 2020, against a 2010 base)*, the ADC Cities Summit Accessible City Working Group emphasized the importance of increasing the proportion of personal travel that is undertaken by the low impact modes of walking, cycling and public transport. Achievement of a ten percentage point increase in travel by such modes will contribute, in particular, to economic or productivity objectives (e.g. substantially lower congestion costs; enhanced energy security), environmental objectives (significant reduction in GHG emissions; improved air quality) and social sustainability and liveability objectives, including improved health and safety outcomes. A ten percentage point increase may sound like a tough target over a decade. However, Melbourne has increased its public transport mode share alone by about half this rate in just five years and the Queensland Government has recently announced an aim of walking, cycling and public transport increasing their combined mode share by about 17 percentage points within 20 years, under new plans to tackle population growth.

In addition to the overall target for travel by low impact modes, the separate target for the proportion of children walking to school (Liveability target 6) is particularly important, given the dramatic increase in car use for school travel noted in *Our Cities* (at page 48). This trend is likely to be a significant contributor to increasing problems of childhood obesity, which needs urgent attention.

Table 1: Proposed Criteria and Targets for Assessing Capital City Strategic Plans

Major focus of criteria and targets for 2020, against a 2010 base	**Productivity outcome**	**Liveability outcome**	**Environmental Sustainability outcome**
Productivity			
1. 18 % increase in city GDP per capita	**Yes**	**Yes**	**Maybe**
2. Youth unemployment rate <3% above overall rate	**Yes**	**Yes**	**Maybe**
3. 10 percentage point increase in mode share for walking, cycling and public transport	**Yes**	**Yes**	**Yes**
4. 95 % coverage of Fibre to the Property	**Yes**	**Yes**	**Yes**
5. 75% of working age tertiary/trade qualified at certificate III or above	**Yes**	**Yes**	**Maybe**
Liveability			
1. Gross urban density to increase>20%	**Yes**	**Yes**	**Yes**
2. All city residents to live within 300m of public open space	**Yes**	**Yes**	**Yes**
3. Halve the percentage of people living below poverty line	**Yes**	**Yes**	**Yes**
4. Halve the number of homeless	**Yes**	**Yes**	**Unlikely**
5. At least 90% agree that their neighbourhood is a good place to live	**Yes**	**Yes**	**Likely**
6. 10 percentage point increase in school children walking/cycling to school	**Yes**	**Yes**	**Yes**
Environmental Sustainability			
1. 30% reduction in GHG emissions on 2000	**Opportunity**	**Yes**	**Yes**
2. Solid waste disposal rates to be less than 0.4 tonnes per capita	**Opportunity**	**Yes**	**Yes**
3. Reduce drinking water consumption by 30%	**Opportunity**	**Yes**	**Yes**
4. 100% achievement of national air quality targets	**Opportunity**	**Yes**	**Yes**
5. Increase in native bird species and numbers (work required to set targets)	**Likely**	**Yes**	**Yes**

Source: ADC Forum 2010, Table 3.

The target for increasing gross urban density (Liveability target 1) is a catch-all way to ensure that urban structure effectively delivers greater intensification of development in coming years, a need that is well recognised by *Our Cities* in many places. Setting a target on gross densities helps to keep the blowtorch on achievement, rather than on more abstract processes that may, or may not, deliver actual outcomes that are supportive of improved productivity, sustainability and liveability. However, achievement of increased densities in our cities requires attention to our second over-arching issue, closing the strategic/local gap on density.

3. Closing the Strategic/Local Aspirations Gap on Density

The ADC Cities Summit Governance Working Group pointed out that, across the developed world, there is widespread agreement among urban planners about the **principles of effective city planning** that should contribute to cities becoming "Better Cities". These principles are reflected in much of the discussion in *Our Cities*. The Governance Working Group's deliberations saw the main principles, in broad terms, as follows (ADC Forum 2010, p. 34):

- 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 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 (e.g. tram lines; key trunk bus routes);
- all neighbourhoods should have access to urban villages and be walkable and cyclable;
- use of public transport should be encouraged wherever possible;
- use of the car should be discouraged wherever possible;
- both open space and recreational space should be accessible to every neighbourhood;
- public space should be human scale, well designed and encourage concentrated and varied activity;
- neighbourhoods should have a diversity of housing to enable people of a wide range of ages and economic levels to live there;
- housing, neighbourhoods and cities should be planned to maximize energy and water efficiency;
- 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;
- regional institutions and services should be located in urban areas;
- cities should have the capability to respond to disasters and the resilience to respond and rebuild.

BIC believes that these principles would have widespread support across Australia's major cities and *Our Cities* reflects much of this thinking. A critical issue for Australia's capital cities, however, is how to reconcile these strategic directions, which are by and large reflected in capital city planning directions, with local aspirations (at a finer urban scale).

The ADC Cities Summit discussed this issue in terms of the city-wide level and the village/precinct level. The **city-wide level** is where broad policy and program directions for city development are set. It is at this level where strategic land use plans are settled and major supportive, city-shaping infrastructure investment decisions are made. The **village/precinct level** is the urban space in which people conduct their daily lives and is where their sense of community is likely to be most firmly based.

Village/precincts can range from small local centres, through large activity centres to Central Business Districts or parts thereof, with a sense of distinctiveness/identity being a key defining quality. Planning and developing villages/precincts such that a greater range of activities can be undertaken locally will support local job creation, social inclusion and enhance accessibility, while reducing emissions.

Our Cities reflects, in many places, the importance of achieving increased densities in our cities. However, attempts to increase densities in inner and middle suburbs frequently encounter NIMBY responses, vital village/precinct and personal space and history being seen as challenged by those who are seeking to lift densities. Many among the community simply reject the planners' solution. In part, these circumstances describe a clash between what planners see as the "public good" and the costs that pursuit of this policy direction are perceived as imposing on particular groups/individuals.

Successful delivery of higher densities requires both strategic and local level engagement, which clearly considers and explains the reasons for changing density (social benefits/externalities in the broadest sense of the terms) and works through ways of minimising the costs to individuals/groups who perceive they are adversely affected, while maximizing local benefits from increased activity possibilities.

Resolving such conflicts is vital in progressing achievement of the various urban development principles. Resolution, however, faces a major stumbling block: language. In discussion of density by the many urban experts at the ADC Cities Summit, it was somewhat surprising that there was a great degree of difficulty in finding the right language to describe just what might be envisaged in "density" terms. The meaning of a "more compact city" or a "higher density" city was not a commonly shared idea. For some it meant increased population and activities around urban nodes. For others it meant population and activity increases along major transport corridors. Others associated higher densities with high rise developments in CBDs and others again with more people living in their neighbourhood, and even Hong Kong like development! Outside CBDs, the conception of increased density that was most widely supported was "higher density, low rise" development.

A critical conclusion from the ADC Summit was the need to develop and share a common language that describes development options for our cities in terms of their built form and associated activity patterns, especially as this relates to concepts of density, as well as better framing the arguments for increasing densities in some areas. That Summit proposed the establishment of a new National Centre for Cities to support such discussion/deliberations on the future of our cities, with bases in all capitals to localise the engagement that will be central to moving forward in closing the strategic/local gap. BIC strongly supports this set of ideas, whose successful prosecution is a pre-condition for ensuring long term productivity, sustainability and liveability of our cities at the levels to which we have become accustomed. Existing institutions have failed to highlight the strategic/local conflicts and to develop a language for discussion. A new National Centre for Cities should be designed to help solve these problems and energise discussion of the possibilities for our cities to remain productive, sustainable and liveable.

4. Responses to Specific Questions in Our Cities

In responding to specific questions, we have chosen to make a small number of key points, recognising that a book could easily be written in answer to each question! In most cases, our points relate to land transport considerations, but with the acknowledgement that these must be part of **integrated**

solutions for our cities. BIC's *Moving People* report presents such an integrated approach to land transport.

1. What is your vision for Australian cities? What should our cities look like in 2030 or even 2050?

As a starting position, BIC's vision for Australia's major cities in 2020 is that they should achieve the targets we have set out in Table 1. More generally, the focus for Australia's cities in future should be on making them **better cities**, not necessarily bigger cities. Many recent population forecasts suggest substantial increases in the populations of individual capital cities, with (for example) 8-9 million in prospect for Sydney and Melbourne within a generation. International liveability rankings provide a warning against populations of this size: no city in the top ten of either the Mercer or The Economist liveability rankings has over 5 million population.

BIC recognises that Australia's major cities will grow but also supports development of new cities of at least 300,000 population in the major north-south corridor, to channel some growth away from Sydney and Melbourne and avoid the external costs that grow with scale.

Our concept of better cities is mirrored in the ADC Cities Summit report (ADC Forum 2010, page 34), as follows:

- encouraging growth in new cities/regional centres as well as adding numbers to existing cities, with the significance of the new cities option increasing with (Australia's) absolute population size. Past experience with attempts to drive much faster growth in selected Australian inland cities, such as Albury-Wodonga and Bathurst-Orange , suggests a need to think carefully about possible locations for New Cities, but a possible Very Fast Train along the Brisbane-Sydney-Melbourne corridor could open up new options in this regard;
- substantially upgrading the condition of our existing cities, such that they too might be seen as new cities (adapting/retrofitting our cities). The middle ring suburbs in our capital cities are ideal locations for a greater share of population and economic activity, including development of a small number of major activity centres (or secondary CBDs);
- focusing on enhanced liveability of villages/precincts within all cities. This is more finely grained than in the preceding point. The "local" level is critical in terms of developing the future. Issues such as driving job creation and innovation from the local level, in areas like energy efficiency, distributed energy generation and water self-sufficiency, promoting local place making and community building are illustrative of the opportunities seen for Better Cities, coming from a local level perspective. Ideas such as lifting density, delivering mixed use, improving connectivity, enhancing local character and providing high quality public realm and good local public transport/walking and cycling options are central;
- pursuing greater community involvement in both planning for, and then delivering, city futures. This is integral to building Better Cities at both city-wide and village/precinct levels;
- much wider roll-out of universal design features as the norm, within new and existing buildings and in public places and on public transport. This has an immediate advantage in terms of inclusion (and is supported as a policy direction by our ageing population) but also creates business development opportunities, given Australia's leading position on accessibility issues;
- designing passive security features in to urban spaces, to make them safer (and hence better) places for all;

- tackling growing problems associated with climate change, such as the urban heat island effect and growing wild fire risks (in the latter case, including a much greater emphasis on the relatively neglected matter of fire prevention); and,
- increasing the availability and affordability of housing, to close the overall demand-supply gap and, in particular, to better meet the housing needs of those in the lower income groups.

2. What do you think may be the differing challenges and opportunities faced by regional cities or cities of different sizes and stages of development?

See comments above about the risks of population exceeding 5 million.

Regional cities have the benefits of lifestyle that go with smallish scale (e.g. lower traffic congestion; stronger sense of community; better air quality, unless specific topographic/climatic features pose problems, such as in Launceston; good access to natural areas) but miss the agglomeration benefits of the largest Australian cities and cannot provide the depth of educational/cultural opportunities. High speed broadband connections will help to loosen the tyranny of distance in terms of locational determinants for business and education but cannot overcome the high end external benefits that larger cities provide in areas like cultural pursuits and restaurants.

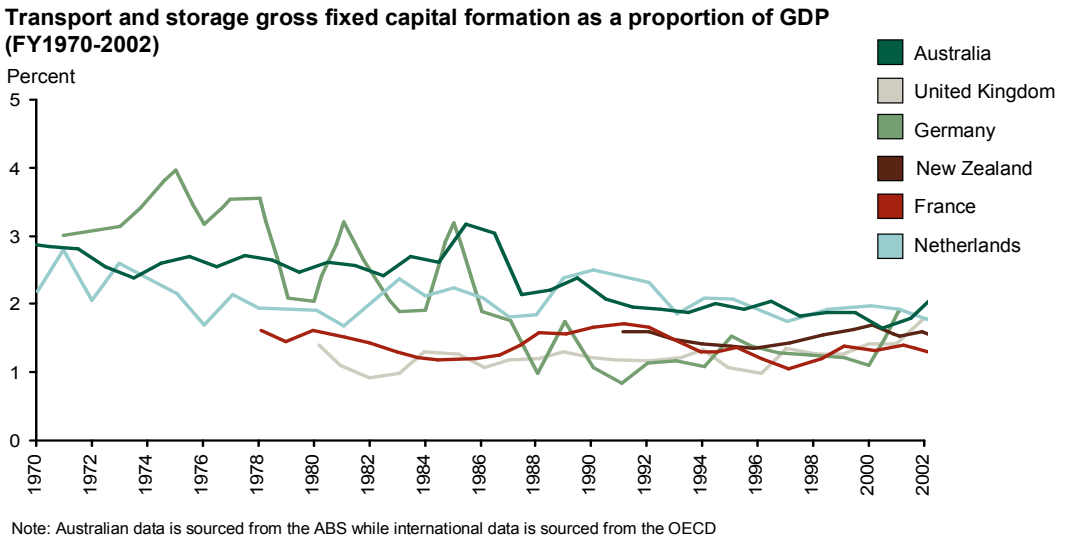
Regional cities of about 300,000 population have a chance to be sustainable long term options and future settlement policy should closely consider supporting growth of a few such new (or expanded existing) cities. Canberra demonstrates this sizing benefit. We noted above that high speed rail in the north-south corridor would assist this process, taking growth pressure away from the largest cities.

3. What do you consider to be the biggest productivity challenges for our cities and what approaches would you encourage governments and businesses to pursue?

The current investment in city infrastructure across a number of sectors is huge. Making the most effective use of that existing infrastructure base is a fundamental pre-condition for productivity, in particular. From a land transport perspective, productivity is being held back by the reduced share of GDP that was devoted to transport investment spending over the last three decades of the last century (see Figure 1) and this has been compounded by road pricing practices that do not encourage efficient use of existing road space. The need to focus much infrastructure investment in coming years on recovery from the major floods and Queensland cyclone will hamper increasing new transport investment in our largest cities.

There is a vast literature that supports the idea that transport investment encourages GDP growth. The establishment of Infrastructure Australia and the focus of transport investments among its suite of supported projects reflects this thinking. BIC strongly supports increased transport investment. Developing a national investment program to support productivity must recognise the inefficient way existing transport resources are allocated, particularly because of road pricing regime that neglects most of the external costs of road travel. Road pricing reform will improve the productivity with which existing scarce road space is used and generate funds for net investment in transport infrastructure.

Figure 1: Transport and storage gross fixed capital formation as a proportion of GDP (FY1970-2002)



Note: Australian data is sourced from the ABS while international data is sourced from the OECD

Moving People set out the main national land transport issues that BIC sees need to be considered in coming years. It summarized those issues in terms of external costs of current travel choices (ARA et al. 2010, page 12):

- traffic congestion, where costs are persistent, high and increasing, with consequences for economic competitiveness and city liveability;
- transport energy consumption, where the high reliance on, and increasing demand for, fossil fuels has consequences for greenhouse gas emissions and energy security;
- the social exclusion confronting many people because of poor mobility or access opportunities, including people in outer suburbs, and remote areas and communities;
- the air pollution consequences of current transport choices;
- the safety and health consequences of current transport choices; and
- ageing transport infrastructure (which accentuates many of the other concerns listed above).

All of these issues have direct productivity consequences. Some are also of concern for sustainability and liveability.

Prices for use of Australia's roads bear little or no relationship to the social or external costs of road use outlined in the first five dot points above. While heavy vehicles (trucks and buses) are charged for their road damage costs, subject to some charge averaging provisions, the current Australian road pricing regime has two major shortcomings:

1. other external costs of road use are ignored in setting charges (external costs are particularly substantial in congested urban areas); and,
2. there is no attempt to relate charges for road use to attributable costs for any other category of road user than trucks and buses (over 4.5 tonnes gross vehicle mass).

A reformed transport pricing regime should become the financial heart of a sustainable approach to national land transport policy, including city transport. We return to this point in relation to question 8 below). Road pricing reform must go hand-in-hand with increased land transport investment spending, to ensure that the best use is made of existing scarce infrastructure and to help identify the highest priorities for new/improved infrastructure.

The pervasive nature of external costs from road use, which are not currently charged to road users, argues strongly in favour of increased investment in public transport being a central element of more productive cities. State Governments and the Federal Government generally recognise this reality, in their current investment plans. However, the roll-out of various transport improvement projects is hindered by shortage of available funds, which means that road pricing reform as a means of raising revenue (as well as of influencing traveller behaviour) should be an early priority in unlocking the productivity potential of transport infrastructure.

4. To what extent can infrastructure planning and investment guide more efficient use of existing infrastructure and resources?

A key here is to get the prices right. If pricing reflects relevant marginal social costs, then infrastructure planning can be undertaken in a way that will provide better price signals towards efficient use of existing infrastructure and better selection of new investment priorities. However, the siloed approach that still dominates sectoral planning of infrastructure and services in Australian states is a further key constraint hindering better use of existing, and prioritisation of new, infrastructure.

This latter problem is very well illustrated by recent persuasive research by National Economics (2010). That research suggests that the poor supply side response to Australia's increasing housing demand, which has resulted in a large and growing housing shortage, particularly of affordable housing, is primarily attributable to: (1) declining transport infrastructure investment (as a share of GDP) in the last decades of the last century, as shown in Figure 1, which meant that growing (fringe) suburbs frequently lack high quality transport connections (including public transport) to areas of major employment concentration and services; and (2) poor job generation towards the outer suburbs, with declining manufacturing employment (for example) not being replaced by jobs with a similar natural habitat towards the outer suburbs. This argument suggests that part of the long term solution to Australia's current housing shortages, including affordable housing, will include better transport connections, including better public transport, between population growth areas and employment locations, together with an increase in local availability of services and an industry policy that promotes economic activities that are suited to outer area locations (inc. manufacturing). This will better align housing and employment locations and help drive the supply stimulus needed to restore equilibrium in housing markets. This strategic perspective is critically important and emphasizes the vital role of taking an integrated approach to our cities.

In short, our answer to this question is to get the prices right and be serious about more integrated thinking about how our cities work, with institutional arrangements structured to support this more integrated perspective, which means a relatively greater focus on place and less emphasis on function.

5. How do we better plan for and protect the infrastructure corridors, strategic sites and buffers we need for the future operation of our cities?

Governance/planning arrangements that bridge the gap between the city-wide and village level, as highlighted in section 3 above, will enable this problem to be resolved, since it becomes a core issue in that gap. Our answers to the governance questions (25-28) are also relevant.

6. What do you consider to be the most significant transport issues affecting our cities and what approaches would you encourage governments to pursue?

Our detailed views on this matter are set out in *Moving People*. In summary, the most significant issues we see are as follows (repeating much of our answer to Q3):

- traffic congestion costs $10 billion annually (valued by what economists call a "deadweight" loss) and this cost is rising, significantly impacting the quality of our lives and our economic competitiveness;
- road transport is our third largest source of greenhouse gas emissions and these emissions are growing, at a time they need to be declining;
- many Australians continue to be socially excluded through inadequate transport systems;
- the road toll, of about 1450 fatalities and 30,000 serious injuries annually, remains unacceptably high;
- our energy security is very significantly threatened by our high reliance on, and increasing demand for, fossil fuels, where we are currently about 50% self-sufficient, with this share expected to fall to about 20% by 2030.

Our ageing transport infrastructure accentuates many of these concerns, as does rapid population growth.

For land transport movement of people, the key government **Policy Objectives** that BIC sees are required to improve the sustainability of our transport systems are:

1. changing the modal balance for transport away from such a high dependence on motor vehicles;
2. improving the environmental performance of all transport modes but particularly of cars and trucks; and
3. ensuring that travel opportunities are available to all, irrespective of personal circumstances.

These three policy objectives can be translated into six major **Program Directions**, with indicative actions of the type shown below.

1. **Reducing the demand for travel**
    - Land use planning (increased density, co-location)
    - Maximising opportunities for walking and cycling
2. **Achieving a shift to lower carbon transport modes**
    - Cars to public transport, walking and cycling
    - Trucks to rail
3. **Improving vehicle utilisation**
    - Higher car occupancy
    - More efficient freight movements
4. **Reducing vehicle emissions intensity**

- More efficient vehicles
- Smaller passenger vehicles
- Alternative fuels
- Intelligent transport systems
- Better driving practices

5. **Increasing mobility opportunities**
    - Provision of reasonable base public transport service levels
    - Using existing public transport opportunities (e.g. school and community buses) more effectively
6. **Creating a more sustainable freight network**
    - Focus on freight movement to ports, hubs and to connect key manufacturing/distribution centres.

These program directions would be supported by a national land transport Action Plan with seven priorities:

1. **Increased investment in public transport** Continue to increase ongoing funding in public transport by all levels of government, to meet existing and future demand. This should focus on increased service levels, improved connectivity (urban and regional) and providing greater service reliability and wider transport choice.
2. **Freight capacity investment and efficiency improvements.** Invest in freight infrastructure, to reduce road congestion and improve road safety, urban amenity and the environment.
3. **Road pricing reform.** Replace existing excise and registration charges with charges that better reflect all the real costs associated with road travel, including congestion, accident, health, road damage, air pollution and noise. Allocate a significant part of the generated revenue to improved public transport services.
4. **Improved accessibility for all.** Provide adequate mobility choices that provide reasonable and equitable access to family and friends, jobs, shops, services and recreation, to promote social inclusion.
5. **More compact, walking and cycling friendly urban settlements.** Improve the long term integration of urban and transport planning to deliver mixed use, cities with multiple activity centres and higher development densities along urban public transport corridors. Aggressively pursue walking and cycling strategies.
6. **Improved fuel efficiency.** Set mandatory fuel efficiency targets to align Australia's vehicles with European standards within the next five years.
7. **Improvements in transport research and information.** Implement an integrated national transport research program that consolidates and extends existing knowledge of transport around Australia.

The accompanying table 2 shows how this action plan directly targets the critical national outcome areas highlighted above, to provide an integrated approach to our land transport future.

Table 2: Alignment of Intended Policy Outcomes and Action Plan Content

		Policy Outcomes				
		A. Congestion Management	**B. Environmental Improvement**	**C. Social Inclusion**	**D. Health & Safety**	**E. Energy security**
Seven Point Plan	**1. Increased investment in public transport**	Modal shift to PT	Lower emissions	Greater accessibility	Fewer injuries and fatalities	Investment in new technologies
	2. Freight capacity investment & efficiency improvements	Reduced road congestion	Less freight related emissions		Fewer severe accidents	Increased energy security
	3. Road pricing reform	Less peak congestion	Lower emissions		Lower emissions	
	4. Improved accessibility for all			Mobility for socially at risk		
	5. More compact walking & cycling friendly urban settlements	Reduced travel need. More cycling and walking require less road space	Lower emissions	Mobility options easier to provide	More physical activity through walking and cycling	
	6. Improved fuel efficiency		Emission standards		Better air quality	Reduced need for imported fossil fuels
	7. Improved R & D	Better transport R & D to meet these outcomes.				

7. How do we best integrate and leverage continuing investment in infrastructure by all levels of government, especially for transport, water, sewerage and energy supply?

BIC sees

- the COAG Capital City Planning process, with outcome targets added, and
- Infrastructure Australia planning/evaluation processes, linked to supporting sectoral development plans, linked with
- pricing reform that internalises external costs

as critical and mutually reinforcing building blocks for continuing infrastructure investment in all of the sectors listed. Those national processes/targets and pricing reforms should encourage more integrated thinking at state and local government level, particularly if a greater use is made by the Commonwealth Government of matching funding requirements for selected supported initiatives by state and local

governments (and, on occasions, by the private sector, where there are external benefits from an initiative, which a private provider is unable to capture). So far as transport investment is concerned, matching requirements were a common practice from the Commonwealth Government in the 1970s but this approach has lost favour since that time. The Canadians have more recently used this approach across three levels of government, to help facilitate major new transport infrastructure investments. If undertaken in a spirit of co-operation, this should enable each level of government to play its role in a synergistic manner.

8. What is the role of pricing reform (such as water, roads or carbon pricing) in meeting the challenges of Australian cities?

The current investment in city infrastructure across a number of sectors is huge. Making the most effective use of that existing infrastructure base is a fundamental pre-condition for productivity, in particular, as we have argued above. Pricing systems that reflect the marginal social costs of infrastructure provision and use will help to deliver:

- better value from existing infrastructure, through changing behavior in such a way as will substantially reduce externalities (including the economic welfare losses from poorly priced peak use of roads, water and electricity);
- better price signals for guiding investment development priorities;
- revenue to help fund infrastructure improvements.

We focus on road pricing reform.

Road Pricing Reform

As noted in answer to Question 3, prices for use of Australia's roads bear little or no relationship to the social costs of road use. While trucks and buses are charged for their road damage costs, subject to some charge averaging provisions, the current Australian road pricing regime has two major shortcomings:

1. other external costs of road use are ignored in setting charges (external costs are particularly substantial in congested urban areas); and,
2. there is no attempt to relate charges for road use to attributable costs for any other category of road user than trucks and buses (over 4.5 tonnes gross vehicle mass).

It is easy to demonstrate that the current external costs of road use exceed $40 billion annually, whereas excise and registration charge revenue raised from road users is only about forty per cent of this amount.

A reformed transport pricing regime should become the financial heart of a sustainable approach to national land transport policy, including city transport. A reformed road pricing system should cover all vehicle classes and all costs attributable to road use. One possible way to structure such a charging system is to levy, on a marginal social cost basis (with some allowance for charge averaging, given limitations in our ability to calculate accurate marginal social costs):

1. a use-based charge to cover road construction/maintenance costs attributable to light vehicles;
2. tonne-kilometre charges for the additional road damage attributable to heavier vehicles;

3. a use-based charge to cover the external cost component of accident costs;
4. use-based charges to levy the more polluting vehicles for their health (primarily air pollution) costs; and, perhaps most controversially,
5. a congestion pricing to make users accountable for the congestion costs attributable to their road use, by time and location.

Carbon costs attributable to motor vehicle use should be covered through general carbon pricing schemes (not exempted, as proposed by the Carbon Pollution Reduction Scheme). Existing fuel excise and registration charges would be abolished and replaced by the above charges. There would need to be an Intergovernmental Agreement to implement such a system, because the incidence and scale of revenue flows would differ substantially from current arrangements.

These proposals are generally in line with the conclusions of the Henry Tax Review, which found that current road tax arrangements will not meet Australia's future transport challenges[1]. Externality-based charging was proposed, including location-specific charges that would vary by time of day. Any funding shortfalls in providing and operating the road system were proposed by the Henry Review to be met from general taxation revenue or by retaining a network access charge (e.g. registration) or variable charge (e.g. fuel tax).

Implementation of such sweeping reform cannot happen overnight. It will take five to ten years to identify the preferred option, gain community acceptance and implement the new scheme on a wide scale. Alternative travel options, particularly improved public transport services, must be available **before** pricing reform is implemented, to give people an alternative to the car. This helps to mitigate adverse distributional consequences of pricing reform. Transitioning measures such as (for example) peak pricing of toll road use, with discounts for car sharing, can help the process of implementation of road pricing reform.

It is time to commence a community conversation about transport pricing reform, to prepare the ground for eventual change. A wide investigation of issues and possibilities is required, managed by a multi-stakeholder group established for the purpose and with an eminent person as independent chair, to help reconcile the many conflicting interests that will emerge, and to provide public confidence in the process. **This work should not be done in-house by government agencies,** as is the usual practice, since there is typically only very limited identification of possible options by governmental approaches and limited community consultation, with the result that there is no community ownership of answers through the process.

9. How do we best promote and harness private investment in the infrastructure needs of our cities?

Our focus here is again on transport, particularly public transport. We note that public transport is usually a financial loss-making business, whose justification derives from the user benefits and external benefits associated with its use (e.g. congestion cost savings; reducing the risks of social exclusion; lowering greenhouse gas emissions; cutting the road toll, etc). Research undertaken for BIC member, BusVic, has identified that the value of Melbourne's route bus services is about 3.5 times the costs of service provision, or about nine times the financial return on service. The two major categories of quantified benefits were reduced risk of social exclusion and lower road congestion costs.

[1] http://www.taxreview./treasury.gov.au/content/FinalReport.

Promoting and harnessing net new private investment in this situation, without public support, is not impossible but is extremely difficult. The public transport operator cannot capture the external benefits created by their service through an associated direct revenue stream. However, patronage incentive clauses in public transport service contracts could, in principle, be specifically structured to recognise the externality value created by service improvements and generate a revenue flow to operators, based on a return to operators of part of the externality benefits associated with increased patronage. The incentive need not equal the full externality value but should comprise a significant proportion thereof, to encourage new investment by the operator. Payment of such an incentive could then include a requirement that part of the incentive is actually used to support net investment.

BIC is not aware of any patronage incentive that is structured along these lines at present but it would be a creative way to capture externality reduction benefits from public transport while supporting additional investment in services.

A related issue, if increasing operator investment in public transport assets is to be encouraged, relates to the treatment of private bus operator-owned depots. Operators seek to locate depots to minimise the costs of providing their bus services (e.g. to minimise "dead-running", which is needed to position vehicles to operate their routes). There is recent experience of government putting bus services out to tender and subsequently seeking to acquire operator-owned depots. This discourages operators from taking initiatives to invest and improve services, in contradiction to some of the original rationale for involving the private sector in service provision. Operator-owned depots should remain operator-owned!

10. What opportunities do you see for governments to achieve better outcomes for urban communities, by leveraging its investments in other activities such as health and education?

The National Economics (2010) research cited under Question 4 above shows the importance of taking an integrated approach to our cities. That work showed how transport infrastructure and services shortcomings have contributed to the current problem of housing shortages. Ignoring the connection between accessibility and housing will help to ensure that Australia's current problems of a shortage of housing in general, and of affordable housing in particular, will remain. Similarly, research by Dr Janet Stanley at the Brotherhood of St Laurence showed that access to child health facilities in Dandenong was adversely impacted by lack of public transport services (accessibility again being a key problem).

BIC emphasises the importance of taking an integrated place-based approach to our cities, where functional agencies talk to each other and with their local communities to find shared solutions to local/regional problems. The linking role performed by transport is a vital ingredient in these conversations, since accessibility is a critical element in community/individual wellbeing. For people at risk of social exclusion, our research has shown the importance of good local public transport services in providing a social safety net for inclusion.

The outcome targets we have proposed in Section 2 above should help to encourage cross-sectoral leveraging, since the setting of serious targets across such a diverse range of functional areas will mean that individual sectors are unlikely to be able to meet the targets that most relate to their areas of responsibility without involving others.

11. What performance targets should governments set for our public transport systems? How would these be applied and what would their effect be?

In discussing this question, we distinguish between high level or system wide targets and more specific targets that might be embedded in service delivery contracts.

BIC believes that the critical performance target for public transport is a mode split target city wide. In Table 1 we have supported a target of a ten percentage point increase in the modal share for walking, cycling and public transport combined, in each capital city by 2020. Based on experience in cities like Melbourne, Perth and Brisbane, where the public transport mode share has grown significantly in recent years, we would expect that about half of this increase would be contributed by public transport and suggest that this (a five percentage point increase in PT mode share by 2020) would be a suitable target.

Setting a target for the increase in mode share recognises that each city is at a different starting point, in terms of current mode share. A target that each city should achieve the same absolute PT mode share of (say) 20% by 2020 would be a much tougher task for a city whose starting mode share is 8% (in reality, an impossible task!) than for a city where it is 14%. This would be a nonsense target. However, a target that each city should increase its PT mode share by 5 percentage points by 2020 is a fair and achievable proposition. BIC recognises that some small differentiation between cities may still be justified but we propose this given target as a starting point.

The target could be used as a basis for inter-governmental discussions about a city's transport plan, against a 2020 time horizon. Thus, for example, the COAG Capital City Planning process could take this target and aim to ensure that a city's transport plan for 2020 is consistent with this outcome, within the context of the broader ten percentage point increase in share for PTY, walking and cycling combined as proposed in Table 1. This implies, in turn, that the necessary public transport investment and service plans to achieve this outcome are embodied in the capital city transport plans. Funding through sources such as Infrastructure Australia processes should be dependent on these building blocks being in place.

A five percentage point increase in public transport mode share would deliver a major reduction in the external costs of land transport. By way of example, an evaluation of the hypothetical removal of Melbourne's route bus service showed that this would increase the external costs of travel in Melbourne by about $17 billion annually, or about 3.5 times the gross cost of annual service provision. The two major impacts were on increasing the risks of social exclusion (valued using a new approach that is to be published in the *Journal of Transport Economics and Policy* in May 2011) and increasing traffic congestion costs. A 5 percentage point increase in public transport mode share would be expected to have a broadly similar benefit-cost ratio, if bus were to provide a substantial proportion of the increased task. We are not aware of any similar evaluation work on the benefits of rail services.

BIC research on how the land transport sector will need to change to substantially cut its greenhouse gas emissions supports shows the expected impacts of an increase from 7.5% PT mode share in all our capital cities in 2007 to 20% by 2020. These numbers suggest that a 5 percentage point increase in PT mode share in our capital cities would cut annual GHG emissions by about 1 million tonnes. This is a relatively small but important part of an integrated approach to cutting road transport GHG emissions. The main benefits of increasing PT mode share lie elsewhere, as indicated in the Melbourne research (which shows social inclusion and congestion benefits are by far the main benefits).

Table 3: Delivering a 20% Cut in Land Transport Greenhouse Gas Emissions by 2020 Source: (Prof. John Stanley Transport Policy lecture material, The University of Sydney).

Measure	Target	2007	2020	Emissions saved (Mt)
1. Fewer/shorter car trips (kms)	Less urban car kms	-	8%	2.8
2. Shift car to walking/cycling	Active urban trans. mode share	16%	22%	2.7
3. Increase public transport mode share	Urban PT mode share (all trips)	7.5%	20%	2.6
4. Increase car occupancy	Urban passengers/car	1.4	1.6	3
5. Freight efficiency	Less fuel	-	20%	7.7
6. Car Emissions intensity	Less than 2007	-	25%	6.8
Truck emissions intensity	Less than 2007		18%	4.4
Car emissions intensity	*g/km*	*220*	*165*	

12. How can governments best use their leverage to foster more innovation and support the economy of our cities? How will this enhance our competitive advantage in a global context?

Our response focuses again on land transport issues.

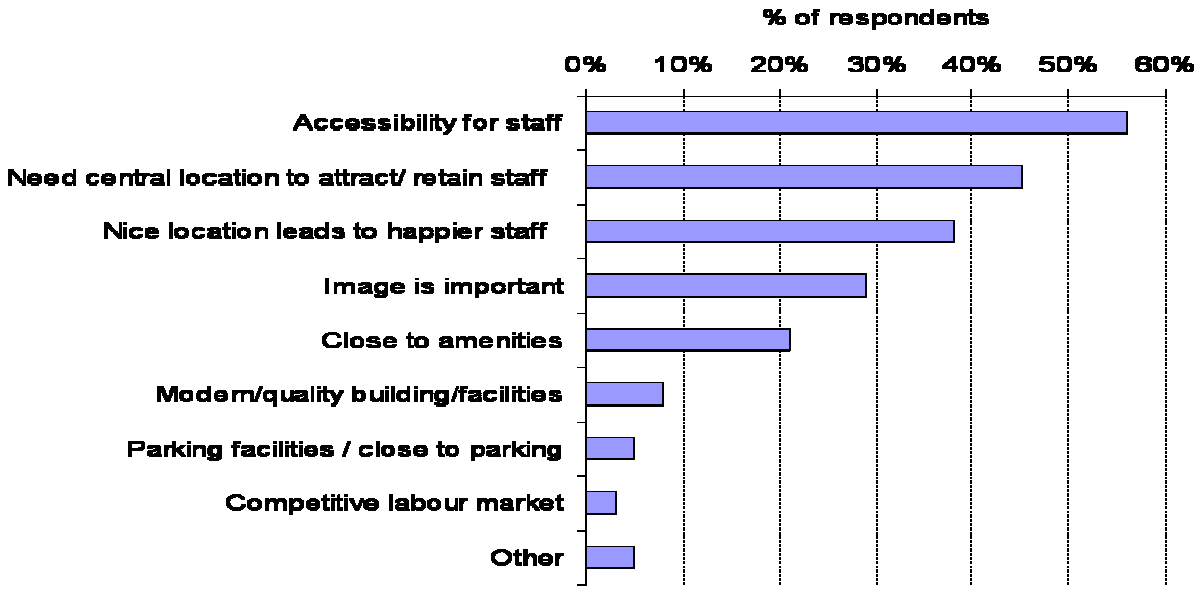
The liveability of Australia's cities is a core element in brand Australia for the 21st century. Knowledge-intensive activities are **key high growth sectors**. They tend to concentrate in cities and city liveability is a key attractor for the highly skilled people who drive growth in this sector.

Also, analysis of the types of economic activities that generate **the strongest local agglomeration economies** points to higher order services, where knowledge spillovers are important. These sectors typically rely on high skill levels, underlining the importance of

- raising skill levels within the labour sheds of urban activity centres (nodes)
- improving access to such centres from areas with high skill concentrations
- improving local accessibility
- improving local business diversity and local business networks and
- focusing on delivering high quality environments within urban nodes, to support consumption externalities that will help to attract skilled workers.

Figure 2 sets out key factors rated as important in attracting and retaining office staff in a Melbourne tenant survey. Accessibility for staff stands out, as does a central location (where accessibility is usually very good). Building choice in a locational sense was rated as very important but amenity considerations more generally were also important.

Figure 2: Factors Rated as Important in Attracting and Retaining Office Staff



Source: Charter Keck Cramer citing Colliers Office Tenant Survey 2008.

Drawing on such background, a key way in which governments can support innovation in our cities is to promote the growth of urban nodes (or urban villages, using our language of section 3 above) that are attractive to knowledge-intensive activities and to those who work therein. This means a focus on place-making and ensuring that cultural and lifestyle opportunities are top of mind. Ensuring high quality accessibility to/from and within these locations is a key requirement for liveability and a decent public transport system/service is fundamental, especially for the larger centres.

13. How can we best protect and enhance land and habitats in and around our cities, where they are ecologically sensitive, of heritage value or highly productive agriculturally?

This matter is a factor in terms of corridor protection for future possible transport facilities. BIC believes that city strategic planning processes need to identify areas of significant ecological and/or heritage value in and around our cities, assess their relative importance and ensure that systems are in place to protect natural systems and cultural heritage sites/areas of high value. In many cases this will mean leaving areas of significant value untouched.

If use of ecologically sensitive areas (part of what are sometimes called natural capital assets) or areas of high heritage value for transport or other purposes is seen as of such importance that the area of high ecological/heritage significance should be sacrificed, than social compensation in terms of replacement by equivalent natural/cultural assets elsewhere should be required as a matter of course. The late

Professor David Pearce, a leader in cost-benefit analysis and environmental economics, calls this an environmentally compensating project in the ecological application. If such replacement opportunities do not exist, then the argument for absolute protection is strong, provided the areas in question can pass a test of real significance.

14. How do you think we can best support more efficient use of resources (such as water, energy and food) in our cities?

BIC believes that the single most important requirement is to ensure that prices reflect all the marginal social costs associated with resource use. We recognise that this involves many difficult valuation issues, especially when it comes to impacts of resource use that are manifest over long periods of time, involving the interests of future generations (who cannot express their preferences in today's resource allocation questions). This is particularly relevant to valuation of climate change externalities. However, ideas such as the conservation of natural capital stocks, as illustrated in our answer to the preceding question, can be used to help tackle such difficulties.

With respect to land transport, our views on pricing reform were set out in answer to Question 8 above. We emphasise the importance of marginal social cost pricing systems in land transport being accompanied by provision of a decent public transport service level, to provide a social safety net and deal with adverse distributional consequences of pricing reform.

On water, we support the idea of catchment caps being used as a constraint on development possibilities, with planning schemes being required to show how future proposed developments are consistent with such caps. Pricing can again be used to more efficiently allocate the scarce resource, provided that provision is made for a base water entitlement for all, to limit adverse distributional consequences.

Energy pricing is seriously out of line with marginal social costs at present, particularly because of greenhouse gas emissions. A proper carbon pricing regime is urgently required to rectify the resulting misallocation of resources.

Valuation of GHG externalities is a contentious matter for efficient resource use, with a wide range of possible prices per tonne available, depending on factors such as whether the valuation is done using damage costs or avoidance costs and the discount rate chosen to express future costs in present values. In transport applications, for example, Maibach et al. (2007), for example, cite costs with central values of €70/tonne CO_2-e for Germany and Switzerland, with a range from €20-280. Parry (2009) cites figures from $US10-70/tonne.

For Victoria, the adoption of a State Government target of cutting GHG emissions by 20% on 2000 levels by 2020 makes the estimation of a marginal cost of carbon reduction a little simpler. An avoidance cost approach can be used in this case, to estimate the marginal costs of cutting GHG emissions at the rate needed to achieve this target. This rate of emission reduction is relatively modest as a state target, such that it can be expected to survive changes in state government against a 2020 time scale.

ClimateWorks Australia (2010) has estimated the costs of Australia cutting GHG emissions by 25% on 2000 levels by 2020, with the average cost of the last 35% of these reductions being about $A61/tonne CO_2. This 35% range includes the marginal tonnage to achieve a 20% cut on 2000 levels, which falls at just over $A50/tonne CO2. A marginal cost of about $50/t thus seems relevant on a medium term basis for Australian carbon pricing, in terms of emission reductions that might be acceptable in international

terms. Pricing emissions from the energy sector (stationary energy and transport) at this rate would help to improve resource use efficiency.

15. How can we best plan and build our cities and infrastructure to achieve a lower ecological footprint?[2]

There is widespread agreement that our cities need to increase their gross densities if they are to be productive, sustainable and liveable. We have noted above some of the important urban development principles that need to be followed in this regard but also pointed to the conflict between strategic development goals and directions and the aspirations of many local communities who feel threatened by the changing focus on density, in particular. Resolving this strategic/local conflict is fundamental to lowering the ecological footprint of our cities.

More broadly, the Ecological Working Group for the ADC Cities Summit proposed setting a number of targets for our capital cities, to help build resilience and lower their ecological footprints. Some of the relevant targets are based on the rather modest (current) national target of a 60 per cent cut in greenhouse gas emissions by 2050, which BIC believes is likely to be increased to about 80% in coming years. So a tightening in some of the targets indicated below might be expected over time. The suggested targets for 2020, as a pathway to 2050 and much higher targets, are set out below and are generally supported by BIC< with the exception that BIC has proposed a reduction of at least 20% in road transport GHG emissions by 2020 (not 15% as in the targets below).

Water

1. Reduction in mains drinking water use: no mains water for outdoor use; 30 per cent per capita reduction from 2000 levels (to 107 litres person/day).
2. Storm water: run-off (quantity and quality) to be at pre-urban levels.
3. Alternative supply: any augmentation from now to be carbon neutral.

Carbon emissions

1. Industrial emissions: 30% reduction from 2000 levels.
2. New buildings and suburbs: 100% carbon neutrality for new buildings.
3. Retrofit buildings and suburbs: 35% reduction from 2000 levels.
4. Transport: 15% reduction from 2000 levels.
5. Electricity supply: 20% reduction from 2000 levels.

Biodiversity and open space

1. Vegetation cover (in hectares): maintain and improve each year.
2. Terrestrial carbon improvement: Net increase in urban green space.
3. Fauna: No species loss.

Land

1. Minimum residential density: average of 25 dwellings/hectare for all new developments.
2. Proximity to mass transit: design to ensure 60% of new dwellings are within 800m of existing mass transit.

Food security

[2] Our response to this question draws heavily on an abconline article written by Professor John Stanley.

1. High value sites are identified (includes areas with productive soils, amenity buffer zones, irrigation assets, biosecurity values): 100% of high value sites remain.

Waste

1. Organic waste: 95% diverted from landfill.

Climate change adaptation

1. All major urban expansion and critical infrastructure: all assets have been assessed for resilience to climate change.

Urban policy more generally needs to actively promote the achievement of such outcomes, in an integrated way. They include some of the next layer of detail to the targets we have set out in table 1.

More compact urban settlement patterns, especially in the middle suburbs of our existing cities, will need to figure prominently in catering for population growth, since this will contribute to achievement of a number of the above ecological targets. A focus on enhancing the local sense of place, with strong community ownership of change processes, is vital in ensuring that such emergent development patterns improve liveability.

An important element in designing resilience policies and programs is to focus on initiatives that deliver multiple benefits. For example, meeting the transport target of a significant greenhouse gas emission reduction by 2020 should be achieved by adopting policies and programs that also deliver benefits in terms of congestion reduction, cleaner air, increased energy security, plus safer and more healthy travel.

Improving public transport is one of several ways this can be achieved, the mutually reinforcing benefits providing far higher community value (by a factor of at least ten to one) than will be achieved by targeting just greenhouse gas emissions reduction alone.

'Whole-of-government' approaches to policy are common language around Australia and internationally but the reality in delivery terms is still primarily silo-based on single functions. Focusing on an integrated set of policies and programs to deliver multiple benefits and enhance urban resilience may assist the process of silo-smashing!

To help future proof Australia's capital cities, the Council of Australian Governments should lead the establishment of a set of outcome targets for their ecological resilience. The establishment of targets demands a monitoring process to assess achievement and adaptive mechanisms to adjust performance. It sets a benchmark against which we can judge how well we, and our political leaders, are going at transforming our cities in ways that will enable them to remain highly liveable. These targets should be part of the Capital City Planning process and adoption of relevant targets should be a condition for states and local governments receiving federal financial assistance for relevant program funds.

16. What are the best steps that could be taken to encourage a concerted effort by communities, businesses and all levels of government to reduce greenhouse gas emissions in cities?

Our reply focuses on land transport.

Table 3 set out BIC's estimate of how a series of initiatives could, in combination, cut land transport greenhouse gas emissions in Australian cities by 20% by 2020, against a base of 2007 emission levels. Table 4 sets out BIC's estimates for land transport emission reductions of 80% by 2050, against a 2007 base. This is the order of magnitude of reduction in GHG emissions that highly developed high emitting

countries like Australia seem likely to be expected to deliver in that timescale. Initiatives include both behaviour change components and technological elements. Behaviour changes will deliver the faster results but major technological changes, especially technological changes that will dramatically cut the emissions intensity of the Australian vehicle fleet, will be critical to achieving significant long term emissions reductions.

Table 4 presents its estimates for two alternative scenarios, labelled "extreme efficiency" and "high efficiency". These scenarios are primarily differentiated by the assumed reduction in the emissions intensity of the vehicle fleet that is achieved by 2050. The "extreme efficiency" scenario assumes a 92% reduction in the emissions intensity of Australia's car fleet and an 89% reduction for trucks. The "high efficiency" scenario reduces this assumed achievement to 75% for both cars and trucks, still a good result. However, the table shows that the "high efficiency" scenario requires massive changes in travel behaviour if it is to still deliver total emissions cuts of about 80% by 2050. For example, PT mode share would need to grow to near 40% in the high efficiency scenario, against about 25% in the extreme efficient scenario. Under the high efficiency scenario, about 50% reduction would be needed in urban car kilometres and there would need to be a massive increase in the transport task performed by walking and cycling. These numbers highlight both the vital importance of dramatic cuts in the emissions intensity of the vehicle fleet and the importance of taking an integrated package approach to cutting transport GHG emissions. BIC believes that reducing vehicle emissions intensity at the rate required will need mandatory emission standards and we propose adoption of the European standards for greenhouse gas emissions, with a five year implementation period.

Table 4: Delivering an 80% Cut in Land Transport Greenhouse Gas Emissions by 2050 (Source: Prof. John Stanley Transport Policy lecture material, The University of Sydney).

Measure	Target	2007	2020 (A)	2050 Extreme efficiency	2050 High efficiency
1. Fewer/short car trips (kms)	Less urban car kms	-	8%	20%	50%
2. Shift car to walking/cycling	Active urban trans. mode share	16%	22%	30%	50%
3. Increase public transport mode share	Urban PT mode share (all trips)	8%	20%	25%	38%
Car mode share		*77%*	*62%*	*48%*	*22%*
4. Increase car occupancy	Urban passengers/car	1.4	1.6	2	2.8
5. Freight efficiency	Less fuel	-	20%	35%	80%
6. Car Emissions intensity	Less than 2007	-	25%	92%	75%
Truck emissions intensity	Less than 2007		18%	89%	75%
Car emissions intensity	*g/km*	*220*	*165*	*18*	*54*

Achieving changes in GHG emissions at the scale indicated in Table 4 will require the concerted efforts across all levels of government and other stakeholders. These efforts are more likely to occur if the set of national targets included in Table 1 of BIC's submission are adopted in the COAG Capital Cities Planning process. Target 14 in that list proposed a 30% cut in GHG emissions (all sources) by 2020 against a 2000 base. All capital cities should be required to meet this target and their urban strategies should be required to show how this will be achieved. Federal funding assistance for cities investment initiatives by states and local government should be conditional, inter alia, on the adoption of this target (and the others in table 1) and associated plans that demonstrate how they will be achieved. As governments agree to such a target, there will be considerable pressure to seek cooperative arrangements that will bring a large number of stakeholders to the table to deliver the goods.

Urgent Federal action on carbon pricing, as distinct from simply talking about carbon reductions, is a fundamental ingredient for any reduction in GHG emissions. At present the Federal Government is lagging a number of States and many local governments in terms of real commitment to action on reducing GHG emissions. For example, Victoria has legislated a 20% emissions cut by 2020. It is time the Federal Government showed real leadership on GHG emissions reduction.

17. How can we ensure that climate change risk is taken into consideration in the design, construction and operation of cities, infrastructure and buildings?

Climate change risk needs to recognise mitigation and adaptation issues. For both mitigation and adaptation, the first requirement is for government, especially the Federal Government, to demonstrate that it is serious about Australia cutting its GHG emissions substantially in coming years. Adoption of the

set of 2020 targets that BIC has supported in this submission for reducing GHG emissions and instituting a carbon price that reaches $50/t within a few years, will help to drive action on reducing climate change risk.

Such leadership will help to drive thinking across a wide range of sectors about how to prepare for an Australia which is characterised by much lower emissions intensity. For example, building developers will see market opportunities in designing and building houses with lower carbon footprints. Carmakers will more actively seek alternatives to high emission petrol engines. Carbon pricing will help to drive change, provided that "the polluter pays" does not shift to become "the polluter gets paid", which diminishes emission reduction potential. States and local governments will see added urgency about planning for climate adaptation.

For mitigation, schemes such as energy efficiency ratings of buildings and GHG ratings of vehicles provide valuable information to assist consumers make choices to buy/rent products with lower carbon footprints. Regulation that sets minimum energy standards (e.g. star ratings for houses) can be used to complement carbon pricing initiatives, especially if the carbon price is set too low to properly internalise all the external costs of climate change (which seems politically very likely for a number of years). Regulation in this case is an important complementary measure to carbon pricing. Mandating vehicle emissions performance in line with European standards within a few years was proposed in answer to Question 16 above, in line with this thinking.

At the city-wide level, urban development policies and programs that support faster intensification will assist in lowering GHG emissions.

On the adaptation side, the recent floods and cyclone in Queensland, in particular, have underlined the urgency of better defining areas in which urban development may need to be restricted. This raises difficult compensation issues but the costs of dealing with the current floods and cyclone are just a foretaste of what can be expected with increasing frequency in coming years. The sooner the tough decisions are made about development no-go areas, the lower the future costs of rectification. This issue should be treated at a national level through COAG and the Capital City Planning process is likely to be a good vehicle for so-doing.

18. What do you think of the concept of more compact development using a variety of building types (such as townhouses and apartments) rather than primarily expanding on the urban fringes?

Our answers to several of the previous questions will indicate that BIC is strongly in favour of more compact urban settlement patterns with a greater variety of building forms and mixed use development. The ADC Cities Summit clearly saw a need for more compact cities, which will require increased densities in some areas (though typically for a very much smaller proportion of the existing built-up area than might be thought - i.e. less than 10%). This need is usually seen as a reaction to various social costs deriving from current low density growth patterns but it can also be suggested that knowledge-intensive job growth is likely to be encouraged by more compact settlement patterns. The changing demographics of our city populations, with increasing numbers of older people, also supports the desire for increasing densities, through increasing the diversity of available dwelling choices (greater mix), located in well designed communities with ready access to essential services. To guard against the risk that increasing densities might over-load local road systems and add to local congestion and air quality problems, active local traffic restraint measures may be required.

BIC believes that the major focus for more compact development should be the middle and inner ring suburbs (brownfields redevelopment/infill). These areas tend to be relatively job/activity rich and usually have trunk transport, water and energy infrastructure networks which provide a basis for enhancement/upgrading. A focus on ensuring a very high quality public domain and sense of place is critical to successful achievement of more compact settlement patterns, given Australian cities' historical attachment to the single dwelling development pattern.

Achieving more compact city development in selected locations is costly. If it was otherwise, the market would have already met demand. A key problem is the time to achieve planning approvals, often compounded by the need to de-contaminate sites for new uses. Significant increases in more compact settlement patterns are likely to require an active role in land assembly by State land development agencies, to accelerate the rate of site availability. Part of the funding for such interventions can be sourced from the infrastructure savings to the State associated with a lower rate of development on the urban fringe.

A key requirement in delivering more compact cities in some areas is dealing with the language problem around density that we noted in section 3 above. Until such time as there is a common understanding of what higher density (or more compact) means and what it might look like in physical and social terms in particular locations, it will be difficult to achieve a fast ramp up in selective urban intensification. BIC repeats its support of the importance of a National Centre for Cities to assist this change process, through helping to improve information and understanding.

19. What is the best way to balance density with urban amenity and renewal?

BIC sees this as a problem that needs to be resolved in each city, within a decision making framework that sets strategic policy directions (the COAG Capital City Strategic Planning process and impending federal urban policy), gives better pricing signals (marginal social cost pricing), looks to protect disadvantaged people and seeks to positively engage local communities in discussion and debate about solutions, particularly solutions that deal with density, amenity and renewal.

As we have commented in a couple of locations, probably the single most difficult issue identified by the ADC Cities Summit was a governance matter, concerning resolution of the conflict between **desired strategic directions for city development**, which will involve increases in densities in some parts of our cities, and the **preferences of local people**, who frequently do not accept that increased densities are appropriate in their locality. Long delays in development frequently result, which often leads to Ministers calling projects in, taking local government out of the planning decision.

If the village/precinct is to assume greater strategic significance, as BIC believes it must for productive, sustainable and liveable 21st century Australian cities, then a way to empower and support village/precinct development must be found, while accommodating the strategic requirements of increasing density. This resolution might be approached in the following way:

1. The relevant State Government establishes population/job growth targets (growth potential) for each individual municipal area within the capital city, for a specific future time frame (e.g. 20 years) and targets for affordable housing, as part of its capital city strategic plan. These targets must be reached in negotiation with local government as a collective, to internalize the debate over location within the State/local government decision framework, and both the State and collective of municipal government should sign-off on the targets. The relevant collective for local government in a city will probably be at regional level (an aggregation of councils) but

could be all councils in a given city, if that worked for the councils in question. The sum of the resulting targets across a city will exceed expected population/job growth, because the market will influence where people ultimately live and work, not just governmental targets for growth potential. Having targets with upside capacity should help avoid the need for subsequent protracted delays. The targets that are the result of this process would then be a key input to State Infrastructure Planning processes and to service planning, including provision for what the State will do to help meet affordable housing requirements.

2. The agreement process should identify principles that need to be taken into account in locating the target population/job increases in particular areas. These principles would, inter alia, reflect the intention to pursue transit-oriented development, encourage growth of key activity centres/hubs in a mixed use compact format, achieve high quality public realm, increase diversity in housing choice, provide for affordable housing, optimize the use of existing infrastructure, protect heritage areas and open space, etc.
3. Starting from scratch, a two year period should be sufficient to negotiate agreed targets, particularly since some States are already engaged in this process. The resulting targets and development principles would need to be taken into account by individual councils in preparing strategic plans for their areas. The existence of a signed agreement(s) could be a precondition for a state and its capital city being eligible for possible Federal financial assistance for urban development projects/programs that might emerge through the COAG Capital City Strategic Planning processes (including via Infrastructure Australia processes).
4. Individual municipalities would negotiate with their own communities how to best accommodate the future population/job increases and affordable housing numbers that are included within their respective targets and be given a set period of time within which to make this decision. Since much of this local negotiation could take place in tandem with the strategic negotiation with the State over municipal targets, it would probably only add a year to the maximum two years suggested for negotiation of new strategic targets. If a council failed to make its local decisions about areas where increased densities would be concentrated within the set time frame, the State could take over negotiations in its stead and/or some governmental funding to the municipality could be withheld. The resulting decisions on density (housing diversity, etc) would be incorporated in local planning schemes, with a view to speeding up development implementation timeframes (which will help to contain costs).

These ideas allow democratic processes to work at both strategic and local levels, the former in negotiating the respective targets and the latter in settling locations for increases in population/jobs within each municipality.

In promoting much greater community engagement in our cities, it is important to involve both organised and non-organised community members, including groups who are conventionally excluded, using diverse approaches and with allowance for continuous input and participation.

20. What do you think about the suggestion that transport, housing and social infrastructure should be concentrated in and around activity centres and along transport corridors so that jobs and services are located near where people live? How could this be done most effectively?

BIC is a strong supporter of urban development focusing on growth of a small number of activity centres and major trunk transport corridors in our major cities. Our work with Professor Rob Adams has shown that a major proportion of projected population increases can be catered for in linear corridors, while

major activity centres are also obvious candidates for a larger role, given their agglomeration benefits and contribution to lowering the externalities of sprawl. BIC believes that the target for the proportion of fringe growth should be 30-40% for most capital cities, with 60-70% of population growth occurring within established urban areas. Fringe development must also be planned to mirror some of the compactness features being pursued in middle/inner areas, namely walkability and a high quality sense of place. Smaller lot sizes and house sizes on the fringe will support this direction. Local job generation must be a priority in urban fringe development but this is tough to achieve at a rate much higher than about 200 local jobs per 1000 residents. Ways to get this figure up above 300/1000 should be a priority.

National Economics (2010) has shown how past urban development at the fringe of our cities has been associated with poor access to jobs and services. Dodson and Sipe (2008) have shown how such locations are vulnerable to high fuel costs and high mortgage rates. These past legacies of neglect of services and transport facilities must be rectified at the same time as a greater focus is devoted to more intensive development of selected activity centres and linear corridors. This requires better local transport services in fringe suburbs, including suburbs that are developing, which essentially means better bus services. BIC research suggests that appropriate minimum service levels will vary by location but, in outer urban areas, will typically be something like an hourly bus service within 400 metres of properties, from 6.00am to 10.00pm. on a daily basis, to minimise risks of social exclusion from poor mobility options.

In addition to decent local public transport services, fringe urban areas also need good PT to major regional employment locations, which will typically be in middle suburbs. This requires well planned trunk PT services, including Bus Rapid Transit in some locations.

21. How do we achieve a greater diversity of dwelling types and range of affordable, appropriate housing to meet the needs of occupants across their life stages?

BIC has no particular opinion on this matter, except to note that the concept of "affordability" must relate to affordable living, not just housing. Affordable living means ensuring that there are opportunities to use public transport, to walk and/or cycle in all areas, as well as affordable houses.

22. What actions, incentives and disincentives do we need to reduce people's dependency on private motor vehicles in urban areas?

Our answer to Question 6 summarised our views on this matter. In short, it requires:

- reform of land transport pricing systems, to ensure that users are confronted with the real costs of their travel decisions when they choose to travel. This will raise the cost of motor vehicle use and encourage use of alternatives;
- increased investment in public transport (delivering a higher service level), to provide an attractive alternative to the car, available for current users and "switchers". Melbourne's experience in recent years, where a 30% increase in bus service kilometres was associated with a similar relative increase in patronage, shows what is possible in this regard. The emphasis in improving public transport service levels needs to be on frequency, span of service hours, reliability and network connectivity (of local and trunk services) and better marketing of services. We outlined our views on minimum local public transport services in answer to Question 20. Trunk service frequencies should be far better than local frequencies, the ultimate frequency depending on demand levels and scope to reduce the external costs of car use (but likely to be in the 10-15 minute headway range and occasionally better);
- active encouragement to car sharing, which is a very low cost way of improving the efficiency of vehicle utilisation and getting cars off the road (provided the car sharer was a car driver and now leaves his/her car at home)
- an emphasis on more compact urban form, to help reduce the need to travel and increase the number of trips that can be taken by bicycle or on foot.

Our research has indicated a benefit-cost ratio of about 3.5 for metropolitan route bus services (see answer to Question 11). This clearly indicates that increased investment in bus services would be a good use of public funds.

23. How can active transport (walking, cycling and public transport) be most effectively used to meet the challenges of our cities?

The targets we nominated in table 1 provide a guide to the scale of larger role BIC expects governments to pursue for low impact modes in Australian cities in the period to 2020. That target (3) was for a ten percentage point in mode share for low impact modes by 2020 in each major city.

The way that this increase is achieved will differ between cities but BIC expects that public transport will account for about half the increase in each city, given demonstrated achievement of public transport mode share in some cities in recent years and the greater dependence of walking on urban form, which is slow to change. Our answer to Question 22 indicates the generic types of initiatives that will assist growth in public transport and these initiatives will also assist walking and cycling.

24. What characteristics of the urban environment can encourage people to walk or cycle more?

Research by Bus Association Victoria, using data from the Victorian VISTA household survey, shows Melbourne people who use public transport walk for an average of over 40 minutes a day. For those who use only public transport (no private transport), the average is 47 minutes a day, reducing to 41 for all public transport users (including those with some private transport use). For those who drive, this reduces to an average of 8 minutes a day, less than twenty per cent of the incidental walking done by public transport users (on average). This is a massive difference in incidental exercise. An effective way to encourage walking is thus to improve public transport service levels and to pursue an urban structure that is more conducive to public transport use. Reforming road pricing arrangements will also support increased walking (and cycling), since it will increase the cost of car use for some people. These types of initiative will all change the balance of modal use in favour of public transport, relative to the car, and increase incidental exercise in the process. Further important benefits will also be generated, as discussed elsewhere in this submission (e.g. reduced congestion costs, cleaner air, lower greenhouse gas emissions, fewer accidents, etc).

The current interest in more compact urban settlement patterns in parts of our cities is supportive of the development of walking and cycling but progress in increasing densities is slow. Tackling some of the challenges of resolving the gap between strategic intent and local aspirations, as discussed elsewhere in this submission, is fundamental to accelerating the rate of increase in urban densities.

25. How could the planning arrangements (across all three levels of government) operate differently to improve outcomes for Australia's cities?

Our response to this question focuses on two key issues: first, agreeing long term urban development strategies/plans for each city; and, second, resolving the conflict between **desired strategic directions for city development**, which will involve increases in densities in some parts of our cities, and the **preferences of local people**, who frequently do not accept that increased densities are appropriate in their locality (an issue we have highlighted in several parts of our submission, because of its centrality).

International cities that are widely recognised for their urban strategy/planning work are typically good at vision/long term thinking. They also tend to act in accord with this thinking over a sustained period of time. Vancouver, for example, set down a planning direction back in the 70s, and has refreshed it since but is still largely acting in accordance with the directions set down about forty years ago. Curitiba in Brazil has a similar record of achievement in urban planning going back three to four decades. Both cities settled their land use directions and developed their transport plans to help deliver the land use plan. This sequencing is important. Australian cities are more ad hoc in their approaches to land use/transport, although some recent performance is more encouraging that the extent of integration is improving.

The Capital City Strategic Planning process **must** help to improve land use planning in our cities. As we have indicated at several places in this submission, the chances of successful outcomes will improve if high level outcome targets are agreed for our cities and individual cities (States) are obliged to show how their plans will deliver on the outcomes, with Federal funding assistance linked to the agreements. This process gives the States the power to determine how they will choose to progress but provides accountability for performance. Local Government at industry level should also be part of the agreement process, since city-wide plans require their buy-in for achievement.

Reconciling strategic directions and local aspirations we see as a critical governance issue for resolution. Long delays in development frequently result, which often leads to Ministers calling projects in, taking local government out of the planning decision. Our answer to Question 19 proposed a way to tackle this problem to improve inter-governmental co-operation and integration.

26. Do you think that COAG's current review of capital city planning systems should be expanded to incorporate more of Australia's major cities?

If the current process proves to be a success, then expansion would be a very sensible step. BIC will await evidence of commitment to real outcome achievements through the COAG process before supporting an extension.

27. What could governments do to improve planning and management of our major cities?

Apart from the range of relevant matters we have raised above, a key requirement is for governments to engage in a continuing and open way with citizens about development issues, opportunities and challenges in our cities. Australian cities are generally poor at engaging in policy or planning debates with citizens, including on matters related to our cities. Some positive experiences are available but these tend to be isolated and not on-going.

Our cities are complex systems, facing an increasing speed of change and growing uncertainties about how (and how quickly) climate change will impact on our city systems. Responding to these circumstances, while tackling immediate and pressing problems in areas such as traffic congestion and housing shortages/affordability, is leading to new ways of thinking about city futures. As reflected in discussions at the 2008 ADC Infrastructure Summit and ADC 2010 Cities Summit, transformational change is seen as a fundamental requirement to respond to this changing environment.

Transformational change should not be based on excessive reliance on highly centralized systems, which are not supportive of resilience. A key theme from the ADC Cities Summit was the importance of building resilient cities, with resilience coming from diversified strategies. Distributed solutions are one key ingredient within this mix. This means involvement of a wide range of governmental, non-governmental and business agencies plus local communities, to assemble integrated solutions. Collaborative engagement across such a wide range of interest groups (institutions, organizations and individuals) is fundamental to driving innovation, while building resilience. A culture that is supportive of collaboration and risk-taking should be encouraged to assist this change process. This may yet prove to be the biggest challenge facing our cities in the future. Organisational, institutional and individual capacity to deal with complexity must be supported.

5. Concluding Comment

BIC welcomes the availability of *Our Cities* and the opportunity to comment on the paper. It is vital that an integrated approach to our cities emerges from the response process (and related policy development work). It has been apparent, in responding to the 27 questions, that the subject matter is complex and highly inter-related, as evidenced by the extensive amount of cross-referencing between questions in our response. Federal Government responses need to reflect this level of complexity and must not fragment urban policy for simplicity.

Place, rather than function, needs to be more prominent in Australian urban policy. Our institutions are largely set up on a function base. Federal urban policy must cut across function and emphasise place-based integration, which will require institutional innovation. New ways of thinking and delivering will be central. BIC is keen to be a continuing contributor to the important evolution of Australian urban policy.

References

ADC Forum (2010). *ADC Cities Report: Enhancing Liveability*, ADC Forum, Melbourne,

Australian Government (2010a). *State of Australian Cities 2010*, Major Cities Unit, Department of Infrastructure and Transport, Commonwealth of Australia, Canberra.

Australian Government (2010b). *Our Cities: building a productive, sustainable and liveable future*, Major Cities Unit, Department of Infrastructure and Transport, Commonwealth of Australia, Canberra.

ClimateWorks Australia (2010). *Low carbon growth plan for Australia*, March.

CRA International (2006). Impact on the Australian Economy of Increased Bus Patronage. Report to the Bus Industry Confederation, October.

Dodson, J. and Sipe, N (2008). *Unsettling suburbia: The new landscape of oil and mortgage vulnerability in Australian cities*, Urban Research Program, Brisbane.

Maibach, M., Schreyer, C., Sutter, D., van Essen, H.P., Boon, B.H., Smokers, R., Schroten, A., Doll, C., Pawlowska, B. and Bak, M. (2007). Handbook on estimation of external cost in the transport sector. Produced within the study Internalisation Measures and Policies for All external Cost of Transport (IMPACT), CE Delft, 19th December.

National Economics (2010). *State of the Regions 2010*. Report prepared for the Australian Local Government Association, Canberra.

Parry, I.W.H. (2009). How much should highway fuels be taxed? *Discussion Paper RFF DP 09-52*, Resources for the Future, December.

Stanley, J. and Barrett, S. (2010). *Moving People: Solutions for a growing Australia*. Australian Railways Association, the Bus Industry Confederation and the International Association of Public Transport (UITP), Sydney.