An urban reform agenda for Australia’s fastest growing cities

At a glance

- Infrastructure Australia has used the key findings from the scenario analysis of Melbourne and Sydney and the *Australian Infrastructure Plan* to inform the development of 15 recommendations. These recommendations aim to provide all levels of government with advice on how Australia’s fastest growing cities should update their planning, policy and delivery processes to successfully meet the demands of population growth.
- The recommendations are divided into four areas:
  1. **Deliverability**: Advice on updating the tools governments use to deliver change within Australia’s cities.
  2. **Economic performance**: Advice on improving the relationship between where people live, where jobs are located and the transport networks which connect them, which together have a material impact on the prosperity of our cities.
  3. **Equity of access**: Advice on a set of reforms to ensure our largest cities remain accessible to all as they grow.
  4. **Liveability and resilience**: Advice on the key actions required to maintain and upgrade the key infrastructure and services, which support the liveability and resilience of our cities.

Identifying an urban reform agenda for Australia’s fastest growing cities

While the effects of population growth within Australia’s largest cities will be experienced incrementally over the coming 30 years, many of the key decisions required to successfully cater for change are happening right now. We must ensure that Australia’s governments are equipped with the necessary tools and processes to deliver the planning, policy, regulation and funding required to successfully respond to the population growth.

The scenario analysis for Melbourne and Sydney presented in this paper provides nine key findings that are relevant to Australia’s four largest cities.

The findings are:
- Unplanned growth delivers the worst outcomes for Australia’s fastest growing cities.
- Public transport is crucial to improving accessibility in Australia’s largest cities.
- Cars continue to play an important role in our cities. However, across all scenarios, congestion significantly increases, and adding new roads is only part of the solution.
- We need to use existing infrastructure in our cities more efficiently.
- As demand increases, coordinating and prioritising additional or upgraded infrastructure between and within governments will be a challenge.
Well-planned infrastructure to service employment centres enhances the job accessibility of our cities and can deliver national benefits.

- Land-use and infrastructure planning can help to address inequality of access, but supporting social and economic policies are also required.
- As our largest cities grow and densify, green and public space plays an increasingly important role in maintaining liveability.
- Land-use changes can play some role in addressing the amount of carbon emissions our cities generate.

This analysis provides an evidence base for the impact that population growth will have on the function and liveability of our cities. This paper presents recommendations that draw upon this evidence base to propose a wider urban reform agenda to address the impacts of growth on our cities.

The series of **15 recommendations** aim to provide all levels of Australia’s government with advice on how to better use governance, planning, policy and delivery processes to successfully meet the demands of population growth in Sydney, Melbourne, Brisbane and Perth in coming decades.

In total, the recommendations represent a clear urban reform agenda for Australia’s fastest growing cities.

### 6.1 Deliverability

A central finding of the scenario analysis is that the unplanned growth of Australia’s four largest cities, meaning the delivery of growth without a significant step change in the structure and operation of these cities, will deliver the worst outcomes for both current and future residents. In practice, this means that the planning, policy and regulatory frameworks which underpin our cities will need to be updated to successfully accommodate materially larger populations. Australia’s governments will be tasked with leading the design and delivery of this change, in partnership with the community and private sector.

Our governments have a strong track record of delivering good outcomes within Australian cities. Our cities are world-renowned as attractive places to live and work. However, in the context of significant growth and change, the tools used by governments to deliver change will need to be enhanced, to ensure our communities are effectively supported.

Infrastructure Australia has identified several areas where existing governance and delivery processes should be updated to ensure they are better structured to meet the complex challenges facing some Australian cities.

These include:

- Capitalising on the role of the Australian Government to drive nationally significant reform in our cities
- Establishing metropolitan governance
- Enhancing the sophistication and flexibility of strategic planning tools and processes
- Taking a place-based approach to better deliver change at the local level
- Increasing the quality of community engagement at the strategic planning stage
- Implementing outcome-based regulation to support innovation.
Capitalising on the role of the Australian Government to drive nationally significant reform in our cities

The Australian Government has a clear stake in the successful development of our cities. For example:

- Australia’s largest cities are an important source of Australia’s productivity gains. In 2015-16 Australia’s five largest cities, contributed 65.5% of Australia’s GDP. Of that 65.5%, Melbourne and Sydney alone contributed 42.4%.

- Australian cities are where the bulk of Australians choose to live and work. This means that changes in the performance of our cities have a tangible impact on the day-to-day lives of millions of Australians, and can in turn impact the quantum of welfare support required from the Australian Government.

- Reducing the environmental impact of Australian cities is a significant opportunity to reduce Australia’s emissions as a whole, in line with the Australian Government’s international commitments.

The role of the Australian Government in our cities is determined by the structure of the Australian federation.

State, territory and local governments play a direct role in the planning and operation of cities. They are responsible for long-term metropolitan planning, the approval and delivery of state-significant projects and the delivery of key government services, including transport, health, education, land-use planning, social services and regulation in other areas, such as water. Local governments are responsible for delivering the metropolitan vision at the local level. This entails the approval of local development, the delivery of local infrastructure upgrades and the delivery of key local services, such as waste collection, community development, and maintaining public spaces.

In contrast, the Australian Government is relatively removed from the day-to-day operation of cities. Instead it has a number of levers available to influence the development of cities in line with national objectives. These include levying taxes, implementing policy and regulation reform, overseeing net migration levels and the distribution of funding, including the deployment of a significant infrastructure budget.

The Australian Government is also responsible for Australia’s overall economic performance, which is a function of productivity. Cities are a driver of Australia’s productivity, and improving urban efficiencies is a key tool for improving the nation’s performance.

Since the end of World War II, the Australian Government has used its position in the federation to influence the development of cities, ranging from the provision of loans to state and territory governments to deliver housing in the 1940s to directly funding urban renewal projects in the 1990s under the Building Better Cities program. Despite this good work, to date there has not been a consistent role established for the Australian Government in the development of Australian cities.

Given the significant level of growth projected for our cities and the corresponding level of infrastructure funding that will be required, there is a strong case for the Australian Government to better capitalise on their position within the federation and establish a consistent hierarchy of incentives, which tie infrastructure funding to the delivery of city-based reforms.

The current Australian Government is in part already doing this. At the project level, the Australian Government uses National Partnership and Project Agreements to align the delivery of infrastructure payments with state, territory and local governments meeting important project milestones.

At a spatial level, the Australian Government has recently begun negotiating a series of City Deals, as part of its 2016 Smart Cities Plan. The Deals are place-based funding agreements with state, territory and local governments, and community and private sector partners, covering a range of different policy domains relating to the development of a city or sections of a city. The agreements are to be structured around nationally and locally informed objectives, with conditional Australian Government funding linked to meeting specific objectives.

However, there is currently no single incentive structure focused on driving the delivery of city-wide reforms that create national benefits. The Australian Infrastructure Plan called on the Australian Government to establish ‘Infrastructure Reform Incentives’, which would see additional Australian Government funding provided to states and territories – over and above existing and projected allocations – in return for the delivery of agreed infrastructure reforms. The Australian Infrastructure Plan specifically identified the applicability of this incentive structure to drive the delivery of reforms aimed at improving the productivity, liveability and affordability of Australian cities.

There is a compelling case for the Australian Government to evolve the existing incentive structures to articulate a hierarchy which drives change in our cities at the project, place and reform levels. The introduction of Infrastructure Reform Incentives, alongside the continued use of National Partnership Agreements and City Deals would provide the Australian Government with a robust platform to do this. To be successful the design and implementation of these incentives would need to occur in conjunction with each other, and be informed by a well-evidenced national investment and urban reform agenda for Australian cities.
Recommendation 1

The Australian Government should establish a consistent framework of incentives to drive the delivery of national benefits within our cities at the project, place and reform level. The new framework would include a hierarchy of three incentive types:

- **National Partnership and Project Agreements** which make project funding contingent on meeting specified outcomes across the project lifecycle and demonstrated economic benefit
- **City Deals** which apply a series of locally and nationally informed objectives to a city or part of a city, and make infrastructure payments for the area contingent on meeting those objectives
- **Infrastructure Reform Incentives** which would provide additional infrastructure funding above existing allocation in return for the delivery of policy and regulatory reform focused on improving the productivity, liveability and affordability of Australian cities.

Establishing metropolitan governance

As Australia’s largest cities grow, integrated governance and leadership at a metropolitan level will become a key indicator of success.

For most of Australia’s largest cities, both state and local governments manage different aspects of planning, infrastructure and services. State governments are generally responsible for metropolitan and regional planning, regulating other economic infrastructure such as energy and water, planning and delivering social infrastructure such as healthcare, education and emergency services, and large-scale infrastructure such as public transport and main roads. However, local governments also play a critical role in the planning and development of Australian cities. They implement the bulk of planning policies and approval processes at the local scale, and deliver key services and local infrastructure. As our largest cities grow and change in coming decades, the responsibilities of local governments will increase, as they become a central vehicle for delivering and coordinating change at the suburb and street level.

However, the large number of small local councils in many of our major cities has resulted in cases of fragmented governance, and disjointed infrastructure and service delivery. While state and territory governments have introduced various processes of local government reform, many LGAs do not currently have the necessary scope and scale to effectively meet the demands of rapidly growing urban populations.

The establishment of metropolitan-scale governance provides cities with an opportunity to improve outcomes for local communities and deliver wider benefits for the city as a whole.

Larger governing entities, with sufficient scale, can employ a wider range of skilled staff, enabling them to undertake more efficient infrastructure delivery and operation, and strategic planning. These institutions can also more easily partner with state, territory and federal agencies in the strategic planning and management of their wider cities and regions, increasing their ability to advocate for local and city-wide issues.

Beyond local boundaries, metropolitan governance can deliver wider benefits for the national economy. The Organisation for Economic Cooperation and Development (OECD) has found the degree of fragmentation in a city’s governance structure directly impacts the productivity of the economy. In metropolitan areas with similar sized populations, those with twice the number of LGAs are associated with around 6% lower productivity.

Around the world, cities comparable in size and stature to Australia’s fastest growing urban centres have introduced systems of metropolitan-scale governance:

- In 1999, the national government in the United Kingdom established the Greater London Authority, led by a democratically elected mayor. It is charged with setting the strategic direction for London’s 33 local boroughs, and planning and delivering key city-wide services such as transport, emergency services, and urban development.
- Closer to Australia, in 2010 the New Zealand national government consolidated eight local authorities into a single metropolitan council, the Auckland Council. The new city-wide council, is led by a single mayor, and has responsibility for Auckland’s land-use and transport planning.
- The City of Brisbane is Australia’s largest LGA by population, covering around 1.1 million residents, which is roughly half of the wider Brisbane metropolitan area. The City was established in the 1920s after the amalgamation of a number of smaller LGAs. Its scale allows it to contribute significantly to the strategic metropolitan-regional planning of South-East Queensland across land-use and infrastructure sectors.
There is a strong case for Australia’s fastest growing cities, as they reach a certain size, to establish institutions or processes which enable the increased delivery of metropolitan-scale governance. Reflecting the examples of London, Auckland and Brisbane listed above, there are a number of pathways that this reform can take, ranging from the establishment of intermediary agencies charged with championing a metropolitan focus across governments, to the amalgamation of councils to drive greater scale and efficiency. Each reform process will be different and should be tailored to match the unique size, geography, governance structure and economy of the individual city.

Progress has been made towards metropolitan governance in Melbourne, beginning in the 1990s, and in Sydney, with more recent local government amalgamations. In addition, in 2015, the NSW Government took a significant step towards metropolitan-level governance with the establishment of the Greater Sydney Commission. The organisation leads metropolitan planning for Greater Sydney and is responsible for delivering the Greater Sydney Region Plan.

There is a case for the Australian Government to support these and other processes that support reform, using the hierarchy of incentives outlined in Recommendation 1.

**Recommendation 2**

**Australia’s largest cities should establish institutions and processes which enable the delivery of metropolitan-scale governance.** There are a number of pathways this reform can take, ranging from the establishment of new metropolitan-focused agencies, to the amalgamation of existing local councils. The approach adopted should be tailored to match each city’s unique characteristics.

**Enhancing the sophistication and flexibility of strategic planning tools and processes**

Current long-term planning processes for Australia’s largest cities have followed a broadly similar pattern of development. Long-term population and employment projections are used to generate a high-level picture of what it will be like to live and work and move around in the city in coming decades. These visions are supported by corresponding delivery milestones and policy interventions, such as location-specific targets for the delivery of new housing or the creation of new jobs, the identification of new or upgraded infrastructure, or the development of policy reforms required to support implementation of the future vision. Visions are also communicated to supporting departments, and other levels of government, who play a contributing role in implementing the vision at the local level.

The existing approach has an important and enduring role. Governments will always be required to provide a consistent vision to the community. The complexity of city systems means that the articulation and implementation of a single long-term vision for a city is a difficult process. It runs the risk of setting in place a process of path dependency which may materially constrain decision makers’ ability to be flexible and adapt policy as circumstances change over time. This often means plans have short life-spans, with new plans replacing old ones, beginning the visioning process again. At the same time, the articulation of a single vision, informed by sometimes opaque data and modelling, can limit the quality and outcomes of community engagement.

Australia’s governments have an opportunity to widen the scope of the evidence and tools they use to inform strategic planning. The scenario analysis for Melbourne and Sydney presented in this paper showcases the value that a wider range of strategic planning tools can provide, by building greater sophistication and flexibility into the strategic planning process.

More flexible planning tools, like scenario planning, enable decision makers to better consider the uncertainty facing Australian cities, and test potential future investments and policies against a range of potential long-term outcomes. There is also an opportunity to use these tools to increase the quality and transparency of community engagement processes, which would allow members of the public to better understand and test the proposals put forward by governments.

**Recommendation 3**

**Australian governments should improve the flexibility, transparency and sophistication of current strategic planning tools and practices to improve decision making and deliver better planning outcomes for the long-term growth of our cities.** Key actions include:

- Using more flexible planning tools, such as scenario planning, which account for uncertainty, and rigorously test the feasibility of future options against a range of different long-term outcomes
- Increasing the transparency of the assumptions, data and models which inform long-term planning tools to ensure communities can appropriately understand and test the proposals put forward by governments.
Taking a place-based approach to better deliver change at the local level

Changes to the metropolitan-level size, structure and operation of our largest cities will also mean tangible change to the functioning and character of the local environment for many residents. Done right, these changes can deliver many benefits for the community.

At the metropolitan level, a bigger and more diverse city can increase productivity, raise incomes and enhance a city’s social and cultural diversity. At a local level, increased housing and jobs, alongside new or upgraded supporting infrastructure and community amenities, can enhance liveability.

However, past experience indicates that these local outcomes are not always achieved. The development of Australian cities has been marked by examples of a lack of coordination between different levels of government, and across the different departments and agencies of a single level of government. As a result, there have been instances of new development being delivered without the necessary upgrades to surrounding infrastructure and services. The end result is that the community can be understandably suspicious of change, based on legitimate concerns that additional people and development within their suburb could place pressure on existing infrastructure and services, contributing to a decline in the amenity of their local area.

Examples of poor coordination result when there is a lack of communication and collaboration in the process of translating the long-term metropolitan vision for a city to the local level. Historically, the process for delivering change within Australian cities begins at the state or territory level, where metropolitan land-use, infrastructure and economic plans are developed. These plans identify macro-level changes to the structure and operation of the city required to accommodate the long-term aspirations of the city as a whole.

Once completed, the new metropolitan vision for the city will be translated to the local level by a range of government, private and community actors using a range of mechanisms, including:

- The prioritisation and funding of new infrastructure.
- The rezoning of land for different development scales and uses.
- The upgrading of public and private utilities, services and facilities.
- The implementation of new policies and regulation.

Problems arise in this process when key actors, often focused on a single sector, deliver change within a local area, in isolation from each other, meaning that the needs of an area as a whole are not effectively addressed. For example, there have been cases within Australian cities where increased housing densities are approved for delivery, without corresponding consideration of necessary upgrades to the area’s schools, hospitals and transport infrastructure.

An evolved approach is needed. Around the world, governments are seeking to improve the outcomes of urban change at the local scale, by adopting place-based approaches to managing growth. A place-based approach sees governments design and implement change using frameworks and processes that take account of the local geographic context in which change is being delivered. The focus on a specific place, rather than individual projects, requires governments to consider the interrelated elements and actors driving the development of a city and its composite parts, in turn promoting the delivery of integrated responses to change.

State, territory and local governments should explore opportunities to upgrade their existing processes to better reflect the interrelated context in which change is being delivered within local communities, including:

- **Planning:** the preparation of intermediate planning documents which identify how metropolitan-wide goals for the growth of a city will be translated to the local level and outline an integrated approach for how increased demand for key infrastructure, services and amenities will be addressed.

- **Community engagement:** updating engagement tools to provide the community with information on proposed changes to their area as a whole rather than with regards a specific land-use development or infrastructure project. This would allow the community to understand the broader context in which change is taking place and provide the government with an opportunity to communicate how pressure on existing infrastructure and services will be addressed.

- **Governance and delivery:** the establishment of coordinating governance structures, which draw together the key actors and agencies charged with delivering change within a local area, and identify an integrated approach for the sequencing, prioritisation and delivery of infrastructure, housing and economic development within the area.

Many of these processes are currently being applied at varying scales and levels of maturity across Australia’s cities. State, territory and local governments should explore opportunities to embed this existing good work by increasing the use of these tools and the consistency of their application.
Recommendation 4

Australian governments should adopt a place-based approach when translating metropolitan visions into the sequencing and delivery of development with infrastructure. Opportunities exist for this approach to be applied to the planning, community engagement and governance processes currently used for delivering change at the local level.

Increasing the quality of community engagement at the strategic planning stage

The diverse local communities that make up Australia’s cities have a central role to play in evaluating and ultimately living with the changes that are set to occur across our cities in coming decades. Governments are increasingly understanding and embracing the idea that genuine community engagement is fundamental to the success of urban planning and change.

Community engagement across Australian cities currently takes a number of different forms and occurs at a variety of stages in the planning, design and delivery process, with varied success. While community engagement practices have taken significant strides over recent years, there are challenges with the current approach, including:

- **Timing:** Community engagement processes are generally focused at the design and delivery stage, whether it be for a new infrastructure project, the rezoning of an area, or the re-development of a residential site. In many cases less attention is given to involving the community earlier, at the strategic planning stage, when important decisions are made regarding the direction of the city as a whole, and how change will be accommodated at different geographic scales. As a result, many communities are not effectively engaging with the broader context of change occurring in their city and as a result they are often opposed to the corresponding local changes in their area that result from broader strategic directions.

- **Objectives and processes:** While each process is different, there is a tendency for engagement to be focused on informing, rather than consulting, the community about the change that is going to occur, with the scope for input often limited to small-scale details of the design and implementation. In practice, this means governments fail to capitalise effectively on the potential for communities to contribute valuable local knowledge regarding what problems exist in their areas, and the range of potential solutions to solve them. The community is also more likely to oppose change based on a legitimate feeling that they have not been appropriately involved in the decision-making process.

The implications of poor practice are substantial. Research completed by the University of Melbourne’s Next Generation Engagement Project has found that around $20 billion in infrastructure projects have been delayed, cancelled or mothballed due to community opposition over the past decade.96
The process of engaging communities will always be complex. Communities are understandably wary of change which could have material impacts on their day-to-day lives. Furthermore, communities have become increasingly sceptical of tokenistic or rhetorical engagement to help legitimise a forgone conclusion. At the same time, governments, while being sympathetic to local impacts, must progress outcomes that deliver long-term benefits for the city as a whole.

A greater focus on engaging the community early, when analysis is being undertaken to identify long-term strategic challenges and decisions are being made about the future shape of the city, provides government with an opportunity to rethink existing approaches and draw on different sources of knowledge. Early engagement which provides the community with a real opportunity to influence outcomes will enable governments to arm stakeholders with important information about the challenges and opportunities facing their city. This engagement can also enhance the quality of change when it is delivered at the local level, as it will more likely reflect local perspectives, values and concerns.

To be successful, these processes will need to be accessible to the general community and transparent about the data and analysis underpinning key decisions. Governments will also need to ensure that the process provides the community with a genuine opportunity to identify options for change and contribute to the decision-making process. By harnessing local knowledge through this kind of authentic participation, governments can not only strengthen decision making but help to establish a genuine social licence to operate.

**Recommendation 5**

Australian governments should improve the quality and accessibility of community engagement at the strategic planning stage of a city’s development. Engaging communities at an early stage in a strategic discussion about the options for how their city could grow and change provides them with a genuine opportunity to shape and influence the solutions proposed and increase their understanding of the changes underway in their city. This not only increases the likelihood of support for change at local levels when it happens, but can also enhance the quality and impact of the outcomes delivered.

**Implementing outcome-based regulation to support innovation**

Technological and business model innovation is re-shaping the day-to-day operation of our cities. Alongside population growth, it will be one of the major drivers of change in coming decades. Advances in the collection and storage of data, increasing innovations in energy storage, and the emergence of new disruptive services and applications, are some of the many changes which have transformed the way we use infrastructure. These changes, while often difficult to predict and plan for, can increase convenience for users and enable communities to extract more from the infrastructure we already have.

Government has an important role to play in this process. While technological innovation can deliver many benefits, it is important that the community is protected from adverse outcomes. Government should act as a buffer to prevent the community from being exposed to the safety risks of unproven technologies or patterns of supply. At the same time, it is critical that the actions of government do not stall or prevent the development and deployment of new technology with valuable applications.

While Australia’s governments have generally been supportive of technology change and corresponding innovation, in some cases slow moving regulatory and policy settings, based on an historic understanding of what mechanisms deliver desired public outcomes, have acted as a potential handbrake on change.

Technology is a fast-moving frontier. As a result, it is likely that rigid regulation will remain at least one step behind such change. Under a business as usual approach, new businesses will likely be constrained by artificial limitations on their capacity to innovate, or be forced to operate in legal limbo until their concept is proven. Existing businesses and parts of the community may feel uncomfortable with what they may see as unsafe practices or unfair competition. Where market access is restricted, others in the community may be unhappy that they cannot access services that are available elsewhere.

A more flexible regulatory model which regulates based on outcomes, rather than just outputs, is a viable pathway forward for governments to overcome this dynamic. By examining the impact of a new product or piece of technology on the service delivery outcomes sought by users (such as safety, efficiency or reliability, among many others), regulators can focus their attention on what matters most to the community. Regardless of how a new technology delivers a service, so long as it does not do harm to the community or deliver unfair competitive advantage in the market, it should be given the opportunity to prove itself. This would protect users, but allow markets to innovate in finding lower cost, user-friendly means of achieving a mutually beneficial outcome.
6.2 Economic performance

The growth of Australian cities is an exciting economic opportunity for the nation. As cities grow, businesses take advantage of larger and more skilled labour markets and workers are given more opportunities to develop and broaden their skill base. Population growth in cities is often outstripped by GDP growth, with a doubling of population estimated to produce a 120% increase in city GDP. The economic performance of our cities therefore matters not just at the local level, but for the nation’s productivity.

There is a spatial dimension to the way urban economies operate. The location of jobs and people, and their supporting infrastructure networks, can contribute to or hinder a city’s economic performance.

The current spatial structure of Australia’s largest cities, generally defined by a central core surrounded by low-density, spread-out growth, can be closely linked to Australia’s changing urban economies over time. Our cities developed their core centres as trade and agricultural hubs in the early 1900s, when people and businesses co-located in the dense inner-cities. During the manufacturing era of the 1950s to the 1980s, jobs gradually moved from the inner-city to new outer areas where land prices were cheaper. This decentralisation was enabled by significant growth in private vehicle ownership, which meant the workforce was more mobile and able to access jobs which were not near public transport. Decentralised jobs and private mobility also enabled people to live further away from the city-centre, encouraging the expansion of residential development on the fringes.

In recent decades, the focus of our urban economies has shifted away from manufacturing towards more knowledge-intensive and service sectors. Rather than decentralising, these sectors agglomerate in centres usually at high densities. As a result, there is now an increasing disconnect between the legacy spatial structure of Australia’s largest cities and the shifting focus of our metropolitan economies. This has resulted in a dynamic where a significant proportion of our cities’ populations do not have easy access to major employment centres and the economic opportunities they present. It also means firms’ access is limited to a smaller percentage of the labour market, potentially reducing their efficiency and capacity.

As our largest cities grow, it is critical that the reach and capacity of infrastructure networks, and the relative location of housing and jobs, better align to trends in urban economies.

The scenario analysis provides Australia’s governments with a number of insights for how they can achieve this alignment. The relevant findings from the scenario analysis include:

- Well-planned infrastructure to service employment centres enhances the job accessibility of our cities and can deliver national benefits
- Public transport is crucial to improving accessibility in Australia’s largest cities
- We need to use existing infrastructure in our cities more efficiently
- Cars continue to play an important role in our cities

Moving people and jobs closer together – taking a more active role in supporting the city’s economic geography

The scenario analysis indicates that well-planned employment centres can help to improve job accessibility. For both Melbourne and Sydney, the analysis suggests a potential link between the proportion of morning peak trips to job centres and the percentage of accessible metropolitan jobs. In other words, as more jobs are located in employment centres, accessibility generally increases. Locating jobs in centres which are well-served by transport networks, and minimising the distance that people need to travel to these centres, is good planning practice because it makes it easier for people to get to work, increases the number of jobs available to people and the proportion of the workforce accessible to businesses.

Planning for employment centres is therefore crucial for the economic performance of our cities. This is because it facilitates their key competitive advantage – access to economic opportunities. A well-planned network of employment centres can help improve access to work, develop traditionally job poor suburbs, improve connectivity between centres and make transport patterns more sustainable.
This will be different for each city, as legacy transport networks and residential patterns differ. However, in broad terms, it will likely involve a combination of:

- Increasing residential densities around existing employment hubs – bringing people closer to jobs
- Developing new employment centres around residential growth areas – bringing jobs closer to people.

Investing in transport infrastructure, particularly public transport, can also help to connect key employment centres and residential growth areas.

Governments have had recent success in increasing residential densities in our largest cities, particularly in the inner-city. However, the development of suburban employment centres has proved more challenging. While several metropolitan strategies for Australian cities have outlined detailed plans for the economic geography of their city, in practice the delivery of these visions have faced challenges. For example, a study by the Bureau of Infrastructure and Transport Economics (BITRE) found that since 2001, there has been limited progress in growing employment in targeted suburban centres and concentrating overall employment growth to selected areas in Australia’s four largest cities.

Redistributing employment to targeted centres can be complex because it is often contrary to prevailing market conditions. Employers can be reluctant to move from existing, accessible areas such as the CBD, where the benefits from agglomeration are substantial. In addition, centres that are accessible, have good transport links and sufficient scope for redevelopment are often more attractive for residential purposes. In recent years, due to the rapid growth of Australia’s urban housing markets, residential development has often competed with offices for space.

To overcome these constraints, governments need to take an active role in delivering the economic visions they set for their cities. This requires using new tools and mechanisms. Traditional statutory planning tools such as rezoning and relaxing development restrictions may not be sufficient in influencing the location of economic activity in cities. A broad range of policy instruments and settings are required to ensure underlying conditions make redevelopment and relocation, for jobs and people, an attractive option.

### Recommendation 7

**Australian governments should take an active role in developing employment centres in our largest cities.** A well-planned network of employment centres can help to improve a city’s economic performance, but directing the location of jobs in large cities can be difficult. Governments have an opportunity to make better use of tools and levers to achieve their strategic economic plans and enable labour and capital to access one another efficiently. Key levers include:

- Providing strategic transport infrastructure to ensure employment centres are easily accessible
- Providing fiscal incentives for employers to move to strategic urban centres, subject to appropriate assessment to ensure this use of taxpayer money benefits the city
- Strategically re-purposing underutilised government land to support the growth of new employment centres.

### Improving connections between jobs and people by investing in public transport infrastructure

Population growth, particularly on the scale Australia’s largest cities are expected to experience, poses challenges for our cities’ transport networks. The scenario analysis shows that road congestion and transport emissions increase under all growth patterns, for both Melbourne and Sydney. While there is no single solution to this challenge, investing in public transport is an important part of the answer.

As our cities and the demand for transport grows, so will people’s reliance on public transport. The scenario analysis shows that under all scenarios, public transport mode share increases, particularly for journeys to work. The analysis also found that while the percentage of jobs accessible by road decreases, accessibility by public transport increases. Mass transit is particularly important for cities, to support employment centres and allow workers and businesses to efficiently access each other. It is also able to use space more efficiently than road-based transport and move larger volumes of people.

The Australian Infrastructure Audit found that our cities’ transport networks are already struggling to deal with demand and without action, this trend will continue. Congestion is not only inconvenient, it can lessen the benefits of agglomeration by reducing access to jobs and skilled labour. Current trends of congestion would cost the Australian economy $53.3 billion by 2031 if no action were taken."
To address current congestion and ensure our cities capitalise on the benefits of population growth, governments at all levels need to coordinate investment to expand and upgrade our transport networks to cater for demand. Private vehicles will continue to play a critical role and targeted investment in roads will be necessary to move vehicles off suburban streets and deal with localised bottlenecks and congestion. However, in large cities, public transport will play an increasingly important role in transporting people to jobs, education and leisure activities. Along key trunk routes, where large numbers of people have common destinations (such as an employment centre), the most effective way to transport people is through mass transit. These trunk routes also need to be integrated with public transport feeder services, active transport and road users. As our cities grow, governments will need to increasingly focus on investments that increase the reach, capacity and sustainability of our public transport networks.

Recommendation 8

**Australian governments should increase investment in public transport infrastructure in cities experiencing significant population growth.**

Investment in mass transit is crucial to reducing congestion, increasing accessibility and reducing the rate of emissions growth. This is particularly relevant for higher density areas where space is limited. Governments should prioritise:

- High-capacity public transport trunk routes linking key centres and transport nodes
- Regular and reliable feeder public transport routes, designed to connect to trunk routes and maximise the reach of the network
- Prioritisation of road space for high occupancy vehicles including trams and buses
- Walking and cycling as principal means of transport within centres and to transport nodes.

Ensuring the benefits of existing infrastructure are maximised

The scale of projected population growth and natural constraints of Australia’s largest cities will make it challenging for them to continue growing in geographic size. The majority of development over the next 30 years will need to be in established areas. Even under Infrastructure Australia’s Expanded Low Density scenarios for Melbourne and Sydney, 60% to 70% of population growth is accommodated in infill areas. This will increase demand on infrastructure in these locations. One of the most efficient, financially effective and least disruptive ways governments can cater for population growth in established areas is to ‘sweat’ existing economic and social infrastructure assets. This can be achieved through maintenance programs, enhancing networks through technology and service upgrades, demand management strategies and land-use mechanisms.

Over recent decades, governments’ infrastructure strategies have generally focused on construction and delivery of physical outputs: on time, to budget and to specification. While governments will need to continue building and delivering new infrastructure to meet increased demand there should be a focus on maximising the return on investment from existing assets, particularly around infill development.

The *Australian Infrastructure Plan* found there are examples in Australia’s cities of well-planned and well-delivered infrastructure, from which the full benefits have not been extracted. In the context of governments facing increasing fiscal constraints, ‘sweating’ existing assets can also be preferable to building new infrastructure. This is because the ongoing operational costs of infrastructure assets are often many multiples of the funding required to plan and build them. Given the high costs of physical infrastructure, ensuring existing assets deliver the appropriate benefits can be a low-cost activity that delivers high value over long timeframes.

In managing existing assets, governments should focus on clearing maintenance backlogs, upgrades and expansions where appropriate, and developing demand management strategies to improve utilisation. Strategic land-use planning should support more direct mechanisms, by identifying areas for growth which are well-serviced by existing infrastructure, with additional capacity, or upgrades delivered, to meet increased demand.

**Recommendation 9**

**Australian governments should routinely review the capacity of economic and social infrastructure within our cities and develop strategies to ‘sweat’ existing assets.** This will help to ensure the return on investment is maximised and benefits are shared across the community.

Increasing the efficiency of the road network – the role of demand management

While investment in public transport infrastructure will be crucial to the performance of future cities, it will be only part of the solution to congestion. The scenario analysis found that for both Melbourne and Sydney, private vehicle use (measured in vehicle kilometres travelled) increases substantially under all scenarios. This means that regardless
of the land-use and transport network scenario modelled, road use and congestion increases.

While this does not mean strategic planning and infrastructure investment cannot influence congestion levels, it does indicate that these approaches must be accompanied by other mechanisms to manage demand, such as road user charging.

Road networks are significantly more extensive than public transport, meaning they serve many more origins and destinations, with the added convenience of being able to travel at a time of the driver’s choosing. This flexibility is particularly important for the significant proportion of the residents in our cities who do not live or work in centres that are easily accessible by public transport. The road network also carries about 35% of the domestic freight task and this share is much higher in cities.102

Figure 54 shows estimated capital city mode share since 1900. The mode share for private vehicles has stabilised in recent years, potentially because of shifts to public transport in larger cities. However, flexibility and convenience, combined with the existing structure of our major cities, means light vehicles remain the dominant mode of transport. Private vehicles account for close to 90% of passenger kilometres travelled. Even with substantial mode shift, driven by new investment or policy changes, private vehicles will likely remain a major contributor to urban mobility.

The dominance of private vehicle travel highlights the need to ensure roads are delivered, operated and funded efficiently.

Investment in new roads will be crucial to the development of our cities. However, road construction alone would be an ineffective and inefficient means of catering for growth.

The current approach of road user charging in Australia largely consists of vehicle registration and licence fees (collected by state/territory governments) and fuel excise (collected by the Australian Government). The Australia Infrastructure Plan found this approach to charging for and investing in roads is unfair, unsustainable and inefficient.
The issue of efficiency is particularly acute in our cities where road networks suffer from substantial congestion in peak periods while remaining relatively underutilised over the full 24-hour cycle. Better management of demand for our roads, through pricing, could encourage more efficient use of existing assets and minimise or delay the need for costly new investment. A comprehensive road user charging model offers opportunities to reduce congestion in our cities and make the current system fairer, more sustainable and more efficient.

At a conceptual level, road user charging reform would see all existing taxes and fees removed and replaced with direct charging that reflects each user’s own consumption of the network, including the location, time and distance of travel, and the individual characteristics of their vehicle such as weight and environmental impact.

Road user charging reform would support more efficient use of the road system – and broader transport networks. Location and time-based charging parameters enable providers to actively manage supply and demand. For instance, demand could be managed through changes to pricing, such as incentivising off-peak use or charging a premium to use congested roads during peak periods.

Reform would also necessarily require all charging revenue be hypothecated – that is, quarantined and directed – to investment in the road network. This differs from the current approach where taxes and charges enter consolidated revenue and are allocated to various government spending priorities – both in transport and other areas. This is a more sustainable approach to funding because, provided the charging framework captures the full cost of road provision, funding would increase commensurate with demand.

Although road user charging is a complex reform, the scenarios analysed in this report demonstrate it will be a necessary component of improving the efficiency of our transport networks and ensuring our cities continue to thrive into the future.

**Recommendation 10**

Consistent with the *Australian Infrastructure Plan*, Australian governments should work together to progressively introduce a national heavy and light vehicle road user charging regime within 10 years as part of a broader demand management strategy. A reformed road user charging framework could complement road and public transport infrastructure investment by efficiently managing demand, reducing congestion and delivering a sustainable funding stream.

### 6.3 Equity of access

Providing equal access to housing, jobs, education and services for all people in a city is an important, but challenging goal. Ultimately governments must prioritise and make tough decisions to be able to pay for and deliver the necessary infrastructure to support urban populations in the most efficient way.

The result is a hierarchy of access across different infrastructure assets and types. For example, while not everyone in our cities can expect to (or would want to) live next door to a major train station, university, hospital, or national park, they should be able to reach these facilities within a reasonable travel time. At the local level there is an expectation that communities have access to key amenities and services such as local transport networks, schools, basic healthcare services, and local parks.

The scenario analysis of Melbourne and Sydney indicates that different approaches to land use can produce varying levels of access to jobs, education, healthcare and green space for different areas of our cities. This has broad implications for the city. The quality of access provided to a household has consequences beyond practical considerations such as journey times. Research completed by the Grattan Institute has found that there is a negative correlation between the location of housing and connecting infrastructure in the outer areas of cities, and the achievement of key social indicators such as workforce participation, income levels, education attainment and long-term health outcomes.104

Strategic land-use and infrastructure planning, along with targeted investment can go some way to improving accessibility and the corresponding social outcomes resulting from disparities in access. In particular, Infrastructure Australia sees a role for governments to address two key aspects:

- Improving accessibility for people living in outer-urban areas
- Ensuring public transport infrastructure is accessible for all.
Better connecting communities on the outskirts of cities

The scenario analysis for Melbourne and Sydney presented in this paper indicates that access to jobs, education and health facilities, particularly by public transport, is significantly lower in outer areas than inner and middle suburbs across all scenarios.

The Centralised High Density scenario tends to be the poorest performer for access to jobs in outer suburbs because economic activity becomes more centralised. However, the Expanded Low Density scenario, which sees the greatest proportion of people living in the outskirts of both cities, delivers the lowest levels of accessibility to hospitals, tertiary education and green space, as people move further away from existing facilities. Improving the accessibility to jobs, education and services in outer areas is a crucial task for governments, regardless of how growth is accommodated.

The poor accessibility of these areas can be broadly attributed to two interrelated factors: poor transport connections and dispersed social infrastructure and jobs.

Although there are significant differences within and between Australia’s cities, outer-urban public transport is generally characterised by:

■ **Low levels of access:** Outer suburbs are dispersed over very large geographic areas. This means the coverage of public transport networks, relative to more compact and higher density inner suburbs, is usually lower.

■ **Poor frequencies:** Radial transport networks often mean frequencies increase as routes merge closer to the city-centre.

■ **Longer travel times:** This is generally because accessibility to the network is poorer and travel distances are longer. Disparities in public transport travel times are particularly prevalent for journeys to key employment centres.

Poor public transport connections in outer suburbs have a tangible impact on the quality of life and prosperity of these communities because it limits access to employment, education and other social infrastructure within reasonable travelling time.

Access is further diminished by the dispersed nature of social infrastructure in outer suburbs. Populations are generally less dense on the outskirts of cities, meaning infrastructure like hospitals, universities and schools are more spread out and people need to travel further.

Although there is a clear case for improving accessibility in these areas, the specific solution is not necessarily cut-and-dried. Significant investments in transport infrastructure, particularly mass transit systems, can be difficult to justify in outer suburbs because they are generally best suited to routes where a lot of people travel from one point to another. Lower capacity, flexible and on-demand transport may be more suitable for areas with dispersed travel patterns and relatively small employment centres.
A blended approach, which balances a range of different actions is required. This would include:

- Increasing investment and enhancing transport planning to improve transport connections, particularly public transport, from outer areas to employment centres, and key health and tertiary education facilities. This could include increasing the frequency and spread throughout the day of existing services, upgrading and expanding networks, and enhancing mode integration in outer areas, for example improving the connection between heavy rail services and local feeder bus networks.

- Better integrating and sequencing planning processes (across and within jurisdictions) to ensure the delivery of new residential development is aligned with supporting infrastructure, particularly social infrastructure services such as local healthcare services, schools and parks.

**Recommendation 11**

**Australian governments should focus on improving the access to jobs, education and services for the outer areas of our largest cities.**
A blended approach, which balances a range of different actions, is required. This includes: improving transport connections, particularly public transport, from outer areas to employment centres, and key health and tertiary education facilities, and better sequencing the delivery of supporting infrastructure alongside new residential development in outer areas.

**Making cities accessible for all**

Cities should be accessible for all, including those with limited mobility or disability, parents with young children, and older people. This is particularly true of public transport networks in our cities. There is not only an imperative on the basis of social inclusion and equality to ensure public transport networks are accessible for all, there is also an economic dividend for cities which are open to a diversity of people and provide services for all. Enabling more people to access the opportunities, and jobs, of a city contributes to its productivity and makes it a more attractive place for both people and businesses.

Accessible design can also enhance the quality of public transport networks in general, for example by providing larger, more people-friendly and safer spaces and thoroughfares, and better integrating route and mode interchanges.

The Commonwealth Government introduced the *Disability Standards for Accessible Public Transport* (DSAPT) in 2002. It aims to make public transport accessible for people with a disability by prescribing minimum requirements that transport operators and providers are to meet, and includes performance requirements and timeframes for compliance. States and territories are currently working on mobility upgrades to ensure compliance for the majority of the standards, across modes and geographies, by the end of 2022 (with some exceptions).

The Australian Government should encourage state and territory governments to focus and prioritise efforts toward achieving the full accessibility compliance across public transport networks in Australia’s largest cities. This could form part of broader policy frameworks such as the Australian Government’s City Deals.

Alongside these upgrades, states and territories should also improve their use of data and technology to provide information to customers, particularly the progressive upgrading of facilities across networks so that passengers can efficiently plan and conduct trips in the interim.

**Recommendation 12**

**The Australian Government should encourage state and territory governments to focus and prioritise efforts toward achieving full accessibility compliance across public transport networks in Australia’s largest cities within defined timeframes.** This could form part of broader policy frameworks such as the Australian Government’s City Deals.
Housing affordability

While not a focus of the modelling presented within this paper, Infrastructure Australia recognises the growing impacts of increasing house prices in Australian cities, particularly in Melbourne and Sydney. As our cities grow, issues of housing affordability will become more acute. It is critical that all levels of Australia’s governments ensure that Australia’s largest cities are liveable for a diverse mix of people.

There are a number of potential actions for different levels of government to address housing affordability in our cities. These include:

- **Taxation**: Land taxes and concessions play a significant role in the cost of housing by providing incentives for people to behave in certain ways in the housing market. Infrastructure Australia’s recent research paper *Capturing Value: Advice on making value capture work in Australia* (2016) recommended that a broad-based land tax (replacing existing land taxes) would provide the most efficient, fair and sustainable way to manage land use in Australia, and in particular capture value from infrastructure investment. The paper also recognises the role that a broad-based land tax could play a role in addressing housing affordability in our cities, by more effectively reflecting the value of land, and reducing the transactional costs of purchasing and selling property, encouraging a more productive use of land, particularly in our cities.106

- **Supply**: Providing enough housing in our cities for current and future residents is essential. Our cities will need to deliver significant amounts of new dwellings to accommodate growing populations in the near and long term. This supply needs to be diverse and meet the needs of the community in terms of type and location, responding to changing demographic trends and demands, particularly an ageing population, smaller household sizes, and an increasing preference for the amenity and convenience provided by metropolitan living. Housing supply can be increased through a number of mechanisms. These include reform to planning legislation and regulation, improved processes for sequencing supporting infrastructure alongside new development, stronger community engagement processes, and improved construction methods and materials.

- **Tenure**: A mix of homes which can be purchased, rented either on the market or as affordable homes (at sub-market rates), and social housing are all required in our cities. ‘Affordable housing’ plays a particularly important role in our cities, as an intermediate type of tenure, between social and market rental, in an increasingly expensive housing market. Affordable housing can provide for those workers essential to the city’s functions who are earning lower incomes, and are not eligible for public housing but cannot afford to enter (or live sustainability in) the private market. The supply of affordable housing can be increased in our cities in a number of ways, including by introducing inclusionary zoning, improving developer contributions mechanisms, increasing national, state and territory funding programs, and strengthening the community housing sector to deliver and maintain affordable homes.

6.4 Liveability and resilience

Quality of life is a critical comparative advantage of Australian cities. They are world-renowned as attractive places to live and work. The combination of our spectacular natural environment, cultural diversity and relaxed lifestyle, sees our capital cities routinely listed on global indices ranking them among the world’s most ‘liveable’ cities. Liveability in our cities can differ for people, according to where they live, how much they own and what they value being able to do in their life. In general, the liveability of our cities is measured by factors such as sustainability, walkability, access to public transport, design and accessibility of the public realm and the cost of living.

While internationally recognised for their quality of life, Australia’s largest cities are already beginning to face challenges in delivering adequate liveability standards today (for example, due to the impacts of heatwaves, housing unaffordability and low levels of walkability in neighbourhoods). Significant growth will place these cities under further pressure in the future.

Several findings resulting from the scenario analysis of Melbourne and Sydney, indicated that under all spatial options tested, core aspects of each city, which contribute to the health of the natural environment and the liveability of each city, will be challenged.

Key challenges include:

- Our cities generate a large proportion of Australia’s emissions, and this is set to increase as our cities grow in size and become denser. A stable national framework to respond to climate change is required if our cities are going to meaningfully contribute to reducing Australia’s greenhouse gas emissions to achieve our international commitments, and improve liveability.
Australia’s largest cities are already experiencing an increase in the frequency of extreme weather events and long-term stresses as a result of climate change. As our cities grow, these risks will be compounded and affect larger numbers of people. Our urban systems and networks, particularly our infrastructure, will need to be resilient to manage these long-term stresses and potential extreme shocks.

Green infrastructure and the public realm contribute significantly to the liveability of our cities. Population growth in our cities will place increasing demand for existing green and public spaces. Governments will need to respond to these pressures and maintain and enhance high-quality, flexible public spaces to ensure our cities remain liveable.

Governments must work to maintain and enhance the high quality of life enjoyed today into the future. There are opportunities to act now to address these challenges, and both mitigate the impacts on urban quality of life from population growth and climate change, and enhance our cities to be more liveable, efficient and resilient.

Enabling cities to contribute meaningfully to emissions reductions by establishing a stable national framework

In line with our international commitments, Australia must reduce emissions in order to mitigate the increasing short and long-term impacts of climate change, including increased temperatures, sea level rises, environmental degradation, increases in extreme weather events and increased pressure on resources.

Australia has one of the highest rates of greenhouse gas emissions per capita in the world and it is in our largest cities where the bulk of these emissions originate. The scenario analysis presented within this paper makes clear that, without intervention, our cities will continue to be an increasing source of emissions as they grow in size and scale.

Australia is a signatory to the UN Framework Convention on Climate Change 2015 Paris Agreement, under which it has committed to reduce greenhouse emissions to 26-28% on 2005 levels by 2030. Achieving this commitment will require a significant shift to the way we use energy in Australia. But efforts are currently being hampered by ongoing uncertainty regarding how Australia will respond to meeting its current and future international commitments.

Our cities will play a central role in supporting this transition. The Climate Council has indicated that cuts to emissions in cities could deliver up to 70% of the nation’s required reductions under the Paris Agreement. However, the structure of the Australian federation means that cities cannot act alone in responding to climate change. A national and stable approach is required to provide certainty and enable state, territory and local governments, the community and the private sector to make the changes required to achieve the necessary reductions.

**Recommendation 13**

**Australian governments should work collaboratively to establish a stable national framework to respond to climate change and reduce emissions in line with our international commitments.** A clear policy direction will provide certainty and stability to both public and private sectors, enabling our cities to play a central role in supporting Australia’s transition to a lower emissions economy.

Implementing urban resilience strategies to better manage the increasing impacts of climate change

Climate change is driving shifts in the short-term weather patterns and longer term climate trends across the world. Australia’s largest cities are not immune to the impacts of these trends, particularly given their location in coastal areas, and are already experiencing more frequent extreme weather events (such as storms and bushfires), rising sea levels, reduced rainfall and warmer temperatures. This places pressure on our urban systems and networks, particularly our infrastructure. As our cities grow in size, their ability to withstand these impacts and pressures will be tested even further.

Our cities will need to become more resilient, to ensure they are able to operate through minor disruptions and recover quickly from major disruptions. State and territory governments, in collaboration with local governments, should prepare metropolitan resilience strategies which establish clear policy, regulation and guidelines for strengthening the resilience of the planning, coordination and construction of our cities as they grow.

There are costs – both upfront and ongoing – in making our cities more resilient. However, upfront costs represent an opportunity to invest in our future and secure our wellbeing, and can often reduce long-term costs by improving the efficiency of operation and maintenance, while optimising
Building resilience requires collaboration and strategy across cities. This includes integrated governance, robust physical infrastructure, systems and processes, and engaged communities. Cities should undertake analysis to understand the unique risks they face, and the changes they can implement which will make them more resilient to such impacts whilst enhancing liveability.

**Recommendation 14**

Australian governments should prepare metropolitan resilience strategies which establish clear policy, regulation and guidelines for strengthening the resilience of the planning, coordination and construction of our cities as they grow. This will assist in enabling cities to operate through minor disruptions and recover quickly from major disruptions.

**Investing in green infrastructure and the public realm to maintain and enhance liveability in our cities**

The quality, flexibility and utility of green infrastructure (such as parks, sporting fields and walking tracks) and public spaces (such as squares and footpaths) contribute significantly to the liveability of a city.

Population growth poses a challenge to the future of these spaces in Australian cities. Across all scenarios, the demand for existing green space increases dramatically, as more people are wanting to access parks and sporting fields across both Melbourne and Sydney. At the same time, access to green space reduces across all scenarios, particularly in outer areas where greenfield development occurs away from established green and public spaces. These results highlight the need to prioritise the sequencing of local and accessible green and public space alongside development as our cities grow, in both outer and infill areas.

These pressures will be compounded by other issues as our cities grow, including an increased pressure to convert green and public spaces to new uses, as more homes and buildings will be required to house and service extra people and, the increased scarcity of land in cities which will make it challenging and expensive to create new spaces, particularly in dense areas.

In addition, the delivery of new housing to accommodate growing populations will need to be, on average, at a higher density than the existing housing in our cities today. This will likely result in a lifestyle shift, with more people having less private space than today. Green and public spaces will therefore play a more important role in their lives, for socialising, physical activity, and recreation. This will in turn increase the maintenance and upgrade requirements for our green infrastructure and public realm, including cleaning, safety requirements such as lighting and monitoring, and water requirements for parks and sporting fields.

Enhanced green infrastructure and public realm will make our cities more attractive places for people to live and work, contributing to economic success not only city-wide but for local businesses. A well-designed and connected public realm can also help to increase the ‘walkability’ of neighbourhoods, which can contribute to improved health outcomes and increases in active and public transport use, reducing pressure on other transport networks. These places also play an important role in developing social and community connections in large cities, which will become more important as our cities grow.

As our cities grow, state and territory governments should focus on maintaining and enhancing our green infrastructure and the public realm. This could be achieved through a combination of taxation, policy and regulatory approaches, including upgrading and expanding existing green and public spaces, creating new spaces, and prioritising the shared use of spaces such as public school playgrounds and golf courses.

**Recommendation 15**

As our cities grow, Australian governments should focus on maintaining and enhancing green infrastructure and the public realm to ensure they remain liveable. This could be achieved through a combination of taxation, planning incentives, and policy and regulatory reforms, including upgrading and expanding existing green and public spaces, creating new spaces, and making better use of existing assets.