



Australian Government
Department of Infrastructure
and Regional Development



The Australian Government's Response to Infrastructure Australia's *Australian Infrastructure Plan*

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Australian Government Response

Introduction

The Australian Government is committed to building a stronger and more prosperous Australia through our National Economic Plan for Jobs and Growth. Infrastructure is one of the key pillars that supports this ambition and is fundamental to so many other outcomes which governments seek - economic productivity and efficiency; the liveability and economic capacity of our communities; the connector between people and markets; and importantly the safety of our citizens. In addition, energy, telecommunications, transport and water infrastructure are key inputs to the efficient operation of daily life and of business.

Since 2013, this Government has taken a leadership role on the infrastructure reform journey to achieve better outcomes for our industries and our communities. Australia has benefited greatly from reforms to encourage competition in the water, telecommunications, transport and energy infrastructure markets. The aim of these reforms is to benefit end users. Infrastructure Australia has been a key part of this journey.

The Australian Government is committed to continued improvement of infrastructure delivery in these sectors, including regulatory reform in the energy sector, implementation of the National Water Initiative and the effective rollout of the National Broadband Network (NBN). The construction and completion of the NBN will improve telecommunications in Australia, including in regional areas. This investment means connection to high speed broadband will be available to all Australian homes and businesses by 2020.

The Australian Government's record \$50 billion investment program in new and upgraded land transport infrastructure across Australia is delivering on:

- Safety: through significantly reducing road trauma costs to communities through the National Black Spot Program;
- Relieving congestion and improving the liveability of our cities: through projects like WestConnex which is expected to remove 4,000 trucks a day from Parramatta road; and investment in urban rail projects such as Forrestfield Airport Link, Flinders Link, Sydney Metro City and Southwest, Parramatta Light Rail, Gold Coast Light Rail Stage 2 and the Moreton Bay Rail Link to improve access to public transport in our major cities.
- Connecting regional communities to markets: through the Beef Roads Program and with projects such as Inland Rail, which will cut an estimated 10 hours from travel time for freight between Melbourne and Brisbane.
- Creating new jobs and business opportunities: through progressing projects like the Western Sydney Airport projected to create tens of thousands of jobs in the region - 3,000 jobs during the construction phase, nearly 9,000 on-site jobs in the first five years of operation, growing to 60,000 direct jobs in the longer term.

More importantly, an "aerotropolis" has the potential to generate tens of thousands more indirect jobs as it drives the Western Sydney economy over the next 50 years. Initially, in its very early years of operation, the airport is estimated to add \$77 million to the local economy. This value-add will grow to around \$1.5 billion in the 2060s.



We are also committed to working with the state and territory governments to explore market reform of road services, given the potential benefits such reform offers Australian road users and governments for the sustainable provision of the roads we need into the future. The Council of Australian Governments (COAG), under the Transport and Infrastructure Council, released asset registers and expenditure plans in January 2016.

These allow, for the first time, both road users and investors in Australia's key freight routes access to performance data and investment planning from road operators. All governments are aware, however, that there are many complex issues to investigate before changes to road funding arrangements for light vehicles could be introduced on Australia's large and diverse road network. Fully assessing the impacts of any changes to road funding arrangements for light vehicles on the community and the broader economy, will be central to any decisions governments make on this reform.

All of this investment drives productivity improvements, jobs and economic growth for Australians.

Infrastructure as an enabler

Australia is in its 26th year of economic expansion. The outlook for the Australian economy remains positive. Real GDP grew by over 3 per cent between the June quarter 2015 and June quarter 2016, on a seasonally adjusted basis,¹ which is well above the Organisation for Economic Cooperation and Development average.² This growth is being achieved even while the Australian economy transitions from strong resource investment-led growth to broader-based drivers of activity. The transition is opening up opportunities across the economy for education, tourism and financial services exports, for human services such as health, aged care and child care, advanced manufacturing and for large and small businesses.

In recent years, Australia's population growth has been amongst the fastest in the developed world. Both Sydney and Melbourne are projected to be home to almost eight million people by 2050 and our four biggest cities, on current projections, will increase their overall share of the national population.³ There are also opportunities for growth in Australia's regional centres.

The right infrastructure decisions have the capacity to shape the population distribution of this country. A growing population can be a source of dynamism for the economy. It provides a larger domestic market for business, increases the size of the labour force and facilitates innovation. Our population provides the ideas, the capital and the labour to innovate, build and grow. But it also places additional demands on government budgets in areas such as infrastructure. Ultimately there are only two sources of funding for new and upgraded infrastructure; from tax payers, or from those who directly benefit from the infrastructure.

¹ Australian Bureau of Statistics (ABS) 2016, *Australian National Accounts: National Income, Expenditure and Product, June 2016*, Catalogue no. 5206.0, Table 1, ABS, Canberra.

² Organisation for Economic Cooperation and Development (OECD) 2016, *OECD Economic Outlook, Volume 2016 Issue 1*, OECD Publishing, Paris. http://dx.doi.org/10.1787/eco_outlook-v2016-1-en.

³ Australian Bureau of Statistics (ABS) 2013, *Population Projections, Australia, 2012 (base) to 2101*, Catalogue no. 3222.0, Series B, ABS, Canberra.

The Australian Government's response to the *Australian Infrastructure Plan*

In February 2016, the Australian Government welcomed Infrastructure Australia's delivery of the first 15-year *Australian Infrastructure Plan*, based on a comprehensive top-down audit of the nation's infrastructure assets – across the transport, energy, communications and water sectors. This was a significant milestone – delivering on Infrastructure Australia's mandate to inform the Government's infrastructure reform agenda.

Infrastructure Australia's *Australian Infrastructure Plan* highlighted many of the key challenges facing Australia and examined our prospects for sustainable growth as a highly urbanised and growing nation. Importantly, it acknowledged the priority of the end-users being individuals, families and businesses.

The *Australian Infrastructure Plan*, and its companion document the *Infrastructure Priority List*, provides a positive reform and investment roadmap for Australia and has already been an effective tool in informing decisions by the Australian Government about which further reforms to progress, and over time, investment decisions.

Infrastructure Australia has made 78 recommendations based on a comprehensive top-down audit of Australia's infrastructure stock and needs. The Australian Government supports 69 and notes 6 of the 78 recommendations. Many of the recommendations relate to areas primarily the responsibility of the state and territory governments. The Australian Government will work with state and territory governments to implement the supported recommendations.

The Australian Government's forward vision for infrastructure planning and investment

The Australian Government has already acted on a number of fronts since Infrastructure Australia delivered its Plan in February 2016. Several of the reforms identified in Infrastructure Australia's Plan are already underway. These have focussed on getting more from our infrastructure investment and achieving better integration between our infrastructure needs and our land use planning, especially in and around our urban centres; becoming a more informed investor and having a say in where and how Commonwealth tax payers' funds are invested; encouraging those who are best placed and have the skills to fund and deliver the infrastructure we need, especially the private sector; and adapting to and capitalising on technological advances.

Better integrated planning to increase the liveability, sustainability and economic growth of our cities, towns and economic precincts

Integrating infrastructure and planning decisions across all three levels of government in Australia is essential to meeting the future growth challenges of our cities. The *Smart Cities Plan* released by the Government in April 2016 sets out its vision for Australia's cities, and its commitment to enhancing them through smart policy, smart investment and smart technology. The prosperity of our cities and regional centres, and their overall economic activity, is an issue of national significance and therefore requires national leadership.



Through collaboration across levels of Government, City Deals will allow a more coordinated approach to governance, strategic planning, investment and reform to consider the needs of cities as a whole while also driving national priorities tailored to local needs.

The initial City Deals will be delivered in Townsville, Western Sydney and Launceston. The Government will launch a competitive process to select future regional City Deals in 2017.

This Government is progressing plans for a Western Sydney Airport at Badgerys Creek. The airport is projected to create 3,000 jobs in the region during the construction phase, nearly 9,000 on-site jobs in the first five years of operations, and growing to 90,000 direct and in-direct jobs for the region in the longer-term. In its early years of operation, the airport is estimated to add \$77 million to the local economy. This value-add will grow to around \$1.5 billion in the 2060s. On 13 November 2015, the Australian and New South Wales governments also announced a joint study into the rail needs of Western Sydney. The study will assist these governments to understand the need, timing and service options for rail investment for Western Sydney and the proposed Western Sydney Airport. A discussion paper was released as part of the study to seek input from communities, local government and industry. The study is expected to be completed in the first half of 2017.

Being a more informed investor

Infrastructure Australia's *Infrastructure Priority List* plays an important guiding role in shaping decisions by the Australian governments to achieve a more strategic approach to infrastructure provision in Australia.

As a more informed investor, the Australian Government is moving to be involved in projects earlier and seeking longer term returns on investment. Under the *Smart Cities Plan*, the Australian Government has allocated \$50 million for early infrastructure planning activities for major transformational infrastructure projects. This will allow the Australian Government to help shape infrastructure projects to deliver, not only the best long term economic returns, but benefits for users and the wider community.

As a starting point, the Australian Government is looking to engage with state and territory governments on those transformational urban projects that are addressing a deficiency that has been identified on Infrastructure Australia's *Infrastructure Priority List* and have clear strategic merit, but are at an early stage of development.

The Australian Government for example is providing \$10 million to progress planning for Brisbane's Cross River Rail, including supporting the establishment of the Cross River Rail Delivery Authority. This key funding will also ensure better alignment with key emerging public transport projects within South East Queensland, including Brisbane City Council's Brisbane Metro System.

Another priority area is better road and rail services in regional and remote Australia, to help get products to domestic and international markets efficiently. The Government's Northern Australia Beef Roads Program, provides funding for targeted upgrades of key cattle transport roads to improve the resilience of cattle supply chains in northern Australia, is one key example. Another is our commitment of \$220 million to upgrade rail lines in the Murray Basin.

Increasing private sector involvement

Government budgets cannot, and should not, fund all infrastructure projects. The cost of transport projects should be shared between those who benefit the most from the projects and the broader Australian community.

The Government is increasingly seeking to employ innovative financing solutions including public-private partnerships, balance sheet leveraging and alternative revenue streams such as value capture for major projects. It has already used innovative solutions to support key projects including WestConnex (via a concessional loan for stage 2) and the Moorebank Intermodal Terminal (equity injection). This commitment was strengthened in February 2016, when the Government released its *Principles for Innovative Financing* which set out the Government's expectations for state and territory governments on when and how innovative financing should be used.

The Government also announced the \$5 billion Northern Australia Infrastructure Facility (NAIF) and the \$500 million National Water Infrastructure Development Fund, announced through the White Papers on developing Northern Australia and Agricultural Competiveness, and the \$2 billion National Water Infrastructure Loan Facility, announced in the 2016-17 Federal Budget.

The NAIF will provide concessional finance to encourage and complement private sector investment in infrastructure that benefits Northern Australia. The water initiatives will provide a mix of finance options to accelerate the identification and construction of economically viable water infrastructure that will provide secure and affordable water to underpin growth of regional economies and communities.

These initiatives demonstrate a clear commitment from the Australian Government to deliver infrastructure for all Australians and presents an unprecedented opportunity to generate new jobs and businesses, including for our Indigenous people.

The Government's Asset Recycling Initiative has provided for considerable additional investment into productivity enhancing infrastructure, especially urban transport. Subject to budget constraints, the Australian Government may look for further opportunities to implement programs similar to the Asset Recycling Initiative to transfer mature state government-owned assets to the private sector to unlock capital for new infrastructure.

The Australian Government is opening up a conversation on how we can make better use of value capture to fund the critical transport infrastructure needed for the future.

Value capture can provide for a more efficient and equitable approach to infrastructure development and delivery; and stimulate a better linkage between the infrastructure needed and the broader planning environment. While acknowledging that the majority of value capture levers are the responsibility of state, territory and local governments, the Australian Government has recently released a discussion paper seeking feedback from government, industry and the community on the greater use of value capture to support major infrastructure development.

Adapting to technological change

Our future is data-driven and data supports effective decision making. The Australian Government as an informed investor will collect and leverage data for infrastructure investment decisions, such as analysis of big data for network optimisation, to maximise our existing infrastructure.



The Australian Government is committed to completing a high speed communications network to drive growth throughout the Australian economy. The National Broadband Network will mean all Australian homes and businesses can order a high speed broadband connection by 2020, fostering productivity and providing a platform for innovation to deliver economic and social benefits for all Australians.

The Australian Government is also improving regional communications through the Mobile Black Spot Program which is investing in telecommunications infrastructure to address mobile black spots along major regional transport routes, in small communities and in locations prone to experiencing natural disasters.

Technology in the transport sector is also undergoing a period of rapid change and offers opportunities to maximise the efficiency of our existing infrastructure, reduce congestion and improve safety outcomes. The \$100 million Northern Australia Beef Roads Program allocated to improve cattle supply chains in northern Australia, utilised Commonwealth Scientific and Industrial Research Organisation (CSIRO) modelling to help identify key routes. CSIRO is now capturing additional transport and logistics data across a range of agricultural sectors.

Developments such as automated vehicles are likely game-changers, and innovations such as smart sensors can help us maximise the efficient use of our existing infrastructure stock and realise productivity dividends. Analysing data will help us understand and leverage these technology disruptions.

The Australian Government's \$50 million Smart Cities and Suburbs Program will support local governments to fast-track technology solutions to long-standing urban problems, including congestion and accessibility.

In August 2016, the *National Policy Framework for Land Transport Technology* was agreed by Australia's transport ministers through the COAG's Transport and Infrastructure Council. This framework sets out a national approach to policy, regulatory and investment decision-making for emerging transport technologies and provides the technology industry with a clear indication that Australia is committed to deploying innovative new transport products. The policy framework is underpinned by a 3-year action plan, which includes work in a range of areas such as connected and automated vehicles, transport data and new safety and traffic management technologies.

Commitment to work with States and Territories to do more

Many of Infrastructure Australia's recommendations relate to areas that are primarily the responsibility of state and territory governments, however, the Australian Government has a national leadership role in delivering the identified measures.

In this role, the Australian Government has a collective responsibility with the state and territory governments, as the owners and operators of our land transport networks, to continual improvement of infrastructure delivery. This collective responsibility will be met by working in partnership, formalised through the COAG, and through the establishment of City Deals with all three levels of government.

In the first instance, the Australian Government has announced a suite of additional measures that builds on the Government's comprehensive reform agenda. These focus on those who will benefit most – end-users.



Freight and Supply Chain Strategy

The Australian Government will undertake an independent inquiry to look at how the productivity and efficiency of Australia's freight and supply chain infrastructure can best be lifted. The inquiry will examine any regulatory and investment barriers and opportunities to improve the capacity and reduce the costs of transporting goods through our major national container ports, airports and intermodal terminals.

The inquiry's findings will inform development of a long-term national freight and supply chain strategy for reform and investment.

Urban Rail Plans

Urban rail infrastructure has the potential to transform key parts of our largest cities, efficiently connect large numbers of residents and jobs, move freight from road to rail reducing congestion, and enable private sector investment particularly through value capture approaches.

To better understand current and future rail needs, the Australian Government will work with state governments to develop urban rail plans for Australia's five largest cities (including their surrounding regions).

This work will include examining global trends and drivers of urban rail (including technology developments and changing demographic patterns) and linkages between rail and urban planning, and its outcomes will better inform Government investment.

Study to investigate and communicate the benefits and impacts of land transport market reform

Better linking investment with service delivery is critical to productivity growth. The Australian Government agrees with Infrastructure Australia that road user charging for light vehicles should be further investigated. We have already taken early steps on the reform pathway. As was announced in the Government's response to the 2015 Harper Competition Policy Review, we are working with the state and territory governments to accelerate heavy vehicle reform and investigate the benefits, costs and potential next steps of options to introduce cost reflective road pricing for all vehicles. Phase One of the Heavy Vehicle Road Reform is now complete, and is delivering improved transparency around road expenditure, investment and service delivery through the publication of heavy vehicle infrastructure asset registers and expenditure plans.

The Australian Government will progress next steps for heavy vehicle reform with states and territories through the development of a forward looking cost base; and a discussion paper to inform consultation on options for an independent price regulator.

The Australian Government is committed to understanding the impacts of broader market reform, encompassing user charging for all vehicles. The Australian Government will establish a study, led by an eminent Australian, into the potential benefits and impacts of road user charging for light vehicles on road users. The study will be vital to all governments' consideration of this potential major microeconomic reform. The Study is expected to commence in 2017, and further information about its terms of reference, composition and work program will be announced in coming months.



Any move to implement substantial changes to Australia's road funding arrangements would only go ahead if governments were confident that the benefits to the community of any new arrangements outweigh the costs.

Access to better and more timely data

Access to quality and timely data is critical to decision making on investment and regulation to ensure efficient and productive national freight and commuter movements. The Government has committed to collating and making available data through the Bureau of Infrastructure, Transport and Regional Economics and the Australian Bureau of Statistics. Technology development is making it possible to improve data by extracting information from administrative systems to identify freight routes, speeds and composition. To achieve this the Government will develop a technology plan to improve data collection from all users, the private sector and government across all transport modes (road, rail, sea and air). This will give policy makers, road users and investors a better understanding of what possibilities may exist.

Conclusion

Decisions made many years ago continue to shape our cities and regions today. Decisions made by today's governments will shape our cities and regions for many years into the future.

Infrastructure investment is an important contributor to economic growth in Australia. Ongoing investment will deliver the infrastructure to meet Australia's growing population. Judicious adoption of technology, data analysis, innovative finance and more strategic planning will help maximise the return on investment for infrastructure projects and deliver world-leading infrastructure that supports world-leading cities and regions.

The Australian Government will continue its reform agenda in infrastructure. There is no shortage of reform opportunities which will be explored in partnership with the state and territory governments.

We will continue to drive reform – with a view to Australia being well placed to manage the demands of a growing population, remain internationally competitive and continue to be an attractive investment proposition globally.

Attachment to the Australian Government Response

Productive Cities, Productive Regions

1. Productivity

Recommendation 1.1

The Australian Government should establish *Infrastructure Reform Incentives*, which link additional infrastructure funding to the delivery of reform outcomes.

This mechanism would encourage state, territory and local governments to deliver productivity enhancing reforms to the planning, construction, operation, ownership and governance of Australia's infrastructure. *Infrastructure Reform Incentives* should be aligned to key reforms recommended in this Plan including: improving the governance and operation of our cities and microeconomic reform across the energy, telecommunications, water and transport sectors.

The Australian Government **supports this recommendation where appropriate reforms have been identified and the capacity to provide incentive funding is available.**

The Australian Government is already driving reforms through existing approaches to funding. The Government's Asset Recycling Initiative provided incentive funding to support the selling of mature brownfield assets where the proceeds are recycled into new or upgraded infrastructure.

Through the Australian Government's *Principles for Innovative Financing*, released February 2016, the Government is also working with all levels of governments to implement nationally significant infrastructure reforms. Funding may be contingent on implementation of reforms. Through the *Smart Cities Plan* the Government will work with state, territory and local governments to improve the productivity, accessibility and liveability of our urban centres through coordinated governance, strategic planning, investment and reforms.

In April 2016, the Council of Australian Governments (COAG) agreed that competition and productivity reforms are important to drive Australia's economic performance and living standards. Treasurers are developing a new competition and productivity-enhancing reform agreement, which includes consideration of payments, based on performance for the delivery of reforms.

Recommendation 1.2

Governments should make greater use of well regulated market-based solutions to improve the efficiency of Australia's infrastructure and support productivity growth.

Governments should focus on improving outcomes for consumers – high-quality services at affordable prices – by seeking greater private sector involvement in infrastructure services. In cases where some users bear an unreasonable burden of service changes, governments should provide transitional support or compensation through tax and welfare systems.

The Australian Government supports this recommendation.

Further to its response to the Harper Competition Policy Review, the Australian Government is continuing consultation with state and territory governments on ways to promote more efficient and transparent investment in, and usage of, roads to efficiently meet user needs. For example, the owners and providers of Australia's key freight routes are releasing performance data on some of Australia's most valuable assets and are working with industry on service level standards to inform future investment that reflect heavy vehicle user priorities.

As outlined in its response to the Harper Competition Policy Review in November 2015, the Government is working with state and territory governments to accelerate heavy vehicle road reform (including steps to transition to independent price regulation) and investigate the benefits, costs and potential next steps of options to introduce cost reflective road pricing for all vehicles. This work will include the development of a possible reform pathway and opportunities to address fairness and equity issues through the development of Community Service Obligations and minimum service standards. If agreed by governments, this reform would see the creation of a transparent market for road services.

Recommendation 1.3

Caps, curfews and other restrictions on how our infrastructure is operated and used should be avoided where possible.

Giving Australia's infrastructure the capacity to freely meet its economic and social purposes will open new opportunities for growth and development. Existing regulatory constraints should be regularly reviewed to ensure they remain relevant and new assets – including new ports and airports – should be planned to ensure curfews and other restrictions are avoided.

The Australian Government supports this recommendation in-principle, noting that restrictions on the operation of infrastructure may be necessary to balance community needs with the need to maximise the productivity of infrastructure assets.

The Australian Government recognises that the efficiency of our international gateways and major freight facilities directly affects the competitiveness of Australian industries operating in global value chains. The Government supports a reduction where possible in freight rail curfews to improve connectivity between goods and their domestic and international markets. In line with this, the



Government's planning for a Western Sydney Airport is based on no unnecessary operating restrictions, meaning no overnight curfews on aircraft movement.

However, curfews are in place as a result of a balanced consideration of the needs of the community, the safe and efficient operation of the infrastructure, and its contribution to the economy.

Given the proximity to existing residential areas, the Government is not considering any significant changes to the existing curfew arrangements at airports where curfews currently apply: Sydney (Kingsford Smith) Airport, Essendon Airport, Gold Coast Airport and Adelaide Airport.

Recommendation 1.4

Innovation in infrastructure service delivery should be encouraged through positive, flexible regulatory frameworks.

Where emerging technologies and delivery models disrupt infrastructure markets, governments should respond quickly to ensure regulatory settings maximise productivity growth and reflect the long-term interests of customers.

The Australian Government supports this recommendation.

Capitalising on the opportunities afforded by emerging technologies is a key part of realising the Australian Government's infrastructure agenda. Technology is changing rapidly, bringing with it many potential benefits for our infrastructure networks. These benefits include improved road safety and productivity, more efficient use of existing infrastructure, reduced congestion and a more sustainable environment.

The Government recognises that the regulation of infrastructure must balance community needs, and the safety, security and productivity of our transport and energy networks. New, flexible approaches to regulation will enable technological benefits to be realised, reducing barriers to competition in infrastructure services and delivering efficiency gains to consumers and businesses.

The Government considers, and seeks to reduce the regulatory burden on businesses, individuals and community organisations, through its Regulatory Reform Agenda, under which it made decisions to reduce red tape by a net \$4.8 billion between September 2013 and December 2015. In November 2015, the Government announced it would strengthen the Regulatory Reform Agenda to focus on changes enhancing innovation, competition and productivity.

Through the *National Policy Framework for Land Transport Technology*, agreed by the COAG Transport and Infrastructure Council in August 2016, all governments in Australia have committed to using flexible regulatory approaches to encourage innovation in the transport sector. This involves removing or amending obsolete or outdated regulation, taking a consumer-centric approach to decision making, avoiding favouring particular technologies or applications, and giving preference to low-cost approaches to regulation.

Through the Transport and Infrastructure Council, governments in Australia are also considering the best approaches to regulating emerging technologies such as automated vehicles, and emerging business models in the transport sector.

Recommendation 1.5

Given current expenditure levels are unlikely to be sufficient to provide the infrastructure Australia needs over coming decades, a material increase in funding for infrastructure from both public and private sources is required to meet our infrastructure challenges and boost productivity.

Governments should use infrastructure investments to support opportunities for productivity growth across the economy. These investments should be made on the basis of rigorous assessments for which projects display clearly positive productivity benefits.

The Australian Government **supports this recommendation**, noting that the most important factor in generating the greatest productivity benefits to the Australian economy from infrastructure investment, and sustaining funding and investment in the longer term, is ensuring the right infrastructure projects are delivered at the right time and at the lowest cost.

The Australian Government recognises Infrastructure Australia's findings that demand for transport infrastructure is likely to increase in coming years, particularly due to demographic challenges and economic pressures. Additionally, the cost of meeting these demands is likely to increase in relative terms, especially due to the growing need for urban transport. For this reason, the Government is investing a total of more than \$50 billion in over 1,000 transport infrastructure projects.

In line with all Government expenditure decisions, transport infrastructure spending, including any change in the level of spending, needs to be considered on its merits and in the context of the broader budget position. In particular, it is critical that government decision making is informed by a robust assessment process that considers the costs and benefits of each project. The Government has also committed to having Infrastructure Australia conduct an independent assessment of all nationally significant infrastructure projects and those seeking over \$100 million of Australian Government funding.

To achieve better value for money in the delivery of public transport infrastructure, the Government is committed to utilising innovative funding and financing mechanisms, such as value capture; as well as the use of emerging technologies. The Government's *Principles for Innovative Financing* are available here (link: <http://investment.infrastructure.gov.au/whatis/innovativefinancing.aspx>). The Government also recognises the importance of partnering with the private sector to deliver innovative and efficient infrastructure service outcomes. As part of its Cities Agenda, the Government recently announced the establishment of an Infrastructure Financing Unit to identify innovative financing opportunities.

In the longer term, the Government is committed to investigating reforms in the land transport market in line with recommendations from the Harper Competition Policy Review. The first steps towards a more market based land transport system have been undertaken in partnership with state, territory and local governments through Phase One of the COAG Transport and Infrastructure Council's Heavy Vehicle Road Reform, which is delivering improved transparency around road expenditure, investment and service delivery.



While the Australian Government has an interest in connecting communities and delivering productivity through the transport network, ultimately the majority of transport infrastructure is owned by state, territory and local governments. State and territory governments are encouraged to consider ways their local government systems can increase infrastructure investment by engaging private sector sources of funding to enhance expenditure levels.

In addition to investment in transport infrastructure, the Government has made a significant equity investment into the communications sector through the National Broadband Network. The Government also notes the significant investment in new infrastructure made by the communications industry as part of its ongoing infrastructure upgrade and expansion programs. For example, all carriers are heavily investing in expanding their mobile networks and deploying 4G technologies.

Recommendation 1.6

The Australian Government should consolidate its existing fragmented funding pools into an integrated and transparent Infrastructure Fund.

The consolidation of national funding programs for infrastructure would enable the Australian Government to prioritise investments based on national significance and enable greater public transparency around Australian Government infrastructure funding decisions.

The Australian Government supports this recommendation where the alignment of policy objectives allows for the efficient consolidation of funding programs.

The Australian Government is examining opportunities to streamline funding streams to deliver greater efficiency and reduce overlap. The Government is also seeking to align funding program designs as far as practical, noting that some differentiation is required to effectively deliver on the specific policy objectives and outcomes sought from each investment. For example, the Government's existing funding programs address different policy concerns across a variety of sectors – the Roads to Recovery and Black Spot Programs are different from each other and different from urban water programs. The Roads to Recovery Program provides funding direct to local government authorities for the upgrading and/or maintenance of local roads with councils able to choose the projects at their own discretion according to local priorities. The Black Spot Program aims to improve safety at sites where there have been serious crashes, or where serious crashes are likely, through the implementation of relatively small scale, cost effective works. Given the different policy outcomes of these programs, consolidation would not generate efficiencies or transparency around funding decisions.

The Government remains committed to supporting nationally significant infrastructure that provides value for money for the Australian public and improves Australia's economic productivity, sustainability and quality of life. The Government is ensuring this occurs through consistent, robust assessment and project appraisal processes for projects seeking Australian Government funding, including requiring Infrastructure Australia to evaluate proposals for nationally significant projects and those where \$100 million or more is sought from the Australian Government.

Recommendation 1.7

Governments should increase funding for investments in projects and technologies that make better use of existing infrastructure.

Australia can extract more from existing infrastructure networks through smarter operation, maximising their productive capacity and delaying the need for large-scale investments.

The Australian Government supports this recommendation and is working with state and territory governments on a number of policies designed to make better use of existing infrastructure.

The Australian Government supports improvements to asset management and greater utilisation of infrastructure networks. The Government reinforces its commitment to projects that optimise the use of existing infrastructure, including the adoption of new technologies and processes.

As the predominant owner of land transport assets, state and territory governments are best placed to implement smart Information and Communications Technology (ICT) solutions, on a case by case basis, that maximise value for money and improve project outcomes. Through the Government's *Principles for Innovative Financing*, state and territory governments are required to consider the use of technology to address network deficiencies and optimise the capacity of existing and new infrastructure in advance of developing construction solutions.

The *National Policy Framework for Land Transport Technology*, established by all Australian governments, sets out policy principles to guide the consistent deployment of technologies that make better use of existing infrastructure.

The Australian Government's \$50 million Smart Cities and Suburbs Program will support local governments to fast-track technology solutions to long-standing urban problems, including congestion and accessibility. The Government is currently consulting with representatives from state, territory and local governments, technology companies and researchers on the detailed design of the Program.

Through the COAG Energy Council, the Government is considering how regulatory frameworks in the National Electricity Market can better support demand management strategies that offer less costly and more efficient options than network investments. This includes investigating measures to support innovation in network businesses and the development of contestable markets for services provided by emerging technologies.

Further, where appropriate, the multi-technology mix roll out of the National Broadband Network is making use of existing hybrid fibre-coaxial and copper infrastructure throughout Australia.

Recommendation 1.8

Infrastructure operators should generate, collect and use data to drive greater productivity in infrastructure service delivery.

Information on the performance of, and demand for, Australia's infrastructure networks should be collected and made available to infrastructure operators, third-party developers and users – being sensitive to confidential information and privacy concerns. Readily available data can facilitate improvements to the delivery and use of services and the productive capacity of networks.

The Australian Government supports this recommendation, noting that the provision of data requirements will need to be consistent with security and privacy issues, and avoid unnecessary regulatory burdens on industry.

The Australian Government is committed to enabling innovation to drive greater productivity.

As part of the National Innovation and Science Agenda, it is releasing more non-sensitive public data to enable private sector innovation, and is using this data to improve service delivery and to inform policy, and has committed to invest \$75 million in Data61 — a merge between the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and National Information and Communications Technology Australia (NICTA) — to create Australia's largest data innovation group.

To achieve this the Government will develop a technology plan to improve data collection from all users, the private sector and government across all transport modes (road, rail, sea and air). This will give policy makers, road users and investors a better understanding of what possibilities may exist. The Bureau of Infrastructure, Transport and Regional Economics is working with the Australian Bureau of Statistics to investigate more innovative collection of data on heavy vehicle usage to better target funding for safety and maintenance.

The release of asset registers and expenditure plans by the COAG Transport and Infrastructure Council in January 2016 allows, for the first time, both road users and investors in Australia's key freight routes to view performance data and investment planning from road operators. These Heavy Vehicle Road Reform measures facilitate better and more productive participation from the private sector in the operation of Australia's road network. The collection of data will also be critical to support the Government's long term land transport market reforms in the transport sector.

As part of the *National Policy Framework for Land Transport Technology*, governments in Australia will collaborate to improve the availability of open data in the transport sector.

2. Population

Recommendation 2.1

The Australian Government should drive change in the planning and operation of Australia's cities through the use of Infrastructure Reform Incentives.

The Australian Government should identify a reform agenda and administrative structure that would incentivise state, territory and local governments to implement necessary change. The city-based reforms outlined in the Australian Infrastructure Plan will be a useful reference for government when doing this work.

The Australian Government **supports this recommendation where appropriate reforms have been identified and the capacity to provide incentive funding is available.**

The Australian Government acknowledges that cities are a key driver of Australia's economy, and that there is a need for better planning so that the congestion issues that face international cities do not occur in Australia.

The *Smart Cities Plan* articulates the Government's vision for Australia's cities, and how smart policy, smart investment and smart technology can deliver integrated long-term planning, targeted investment and urban policy reform. The Government will drive change in the planning and operation of Australia's cities through customised City Deals, which will support coordinated planning, investment and reform to address the unique challenges and opportunities in particular cities or urban areas. The Government's \$50 million Smart Cities and Suburbs Program is a key initiative targeted at supporting local governments fast-track transferable technology solutions to long-standing urban problems, including congestion and accessibility.

The Government will also invest \$100 million a year in the Sustainable Cities Investment Fund to support clean energy projects that improve the productivity, accessibility and liveability of our cities. The Sustainable Cities Investment Fund will be managed by the Clean Energy Finance Corporation over 10 years and will support projects that earn a commercial return. It will mobilise private finance by demonstrating the viability of clean energy projects in cities, reducing investment risk.

Projects that could be supported by the Fund include energy efficient infrastructure including battery storage, technology-based solutions such as optimised lighting, traffic management and low emissions vehicle infrastructure and energy efficient housing. The Fund will support opportunities at the local level, in schools, hospitals and other public infrastructure, as well as for a wide range of urban infrastructure investment supported by private sector finance.

In April 2016, the Council of Australian Governments agreed that competition and productivity reforms are important to drive Australia's economic performance and living standards. Treasurers are developing a new competition and productivity-enhancing reform agreement, which includes consideration of payments, based on performance, for the delivery of reforms, including those around planning cities.

Recommendation 2.2

The Australian Government should deliver a National Population Policy to identify Australia's population pathway over the next 50 years and outline the Australian Government's options to shape that growth.

The articulation of a national policy will enable the Australian Government to establish a vision for Australia's growing population and identify the necessary options to ensure we fully capitalise on the potential benefits for the economy and community.

The Australian Government **does not support** the development of a National Population Policy.

Every five years, the Australian Government produces an Intergenerational Report which looks 40 years into the future. It assesses the long-term sustainability of current Government policies and how changes to Australia's population size and age profile may impact economic growth, workforce and public finances. It also examines the policy settings required to promote jobs, growth and opportunity and ensure that Australians continue to enjoy high living standards in the future.

Australia's immigration programs are designed to balance our social and economic needs with those of our natural and built environments. The size and composition of the Migration Program are set annually and are informed by a range of factors, including the impact on Australia's population, net overseas migration and long-term demographic trends.

The Australian Government has made improving the liveability, accessibility and productivity of our cities and regions a priority under its national economic plan. Through the Government's more than \$50 billion investment in infrastructure and the *Smart Cities Plan*, we are working closely with state, territory and local governments to ensure infrastructure planning and investment is aligned across all levels of government and keeps pace with demand and meet the needs of our changing population size and distribution.

Recommendation 2.3

To meet the demands of population growth Sydney, Melbourne, Brisbane and Perth should accelerate the delivery of high-quality, higher density development within established urban areas.

As part of their metropolitan planning processes, governments should take steps to reduce urban sprawl and ensure the majority of new housing supply is medium to high-density and delivered in established urban areas.

The Australian Government **supports this recommendation**, noting this is an area of state and territory government responsibility.

The Australian Government will work with state and territory governments to meet the needs of our changing population size and distribution. The Government's *Smart Cities Plan* recognises that all governments in Australia, and the private sector, have a role in increasing housing supply in the right locations. Aligning the delivery of new housing supply and jobs growth, as well as improved transport connections, so more people can live closer to work, or get to work more easily, is a key focus of the *Smart Cities Plan*.



To better understand current and future rail needs, the Australian Government will work with state governments to develop urban rail plans for Australia's five largest cities (including their surrounding regions). This work will include examining global trends and drivers of urban rail (including technology developments and changing demographic patterns) and linkages between rail and urban planning, and its outcomes will better inform Government investment.

Through its *Principles for Innovative Financing*, the Government is committed to funding mechanisms such as value capture that will provide opportunities to influence the planning and design of our key economic hubs.

Recommendation 2.4

All governments should ensure that processes are in place to deliver high-quality, well-designed, higher density development, connected to infrastructure and public amenities.

Mechanisms available to government include:

- At state and territory level, governments should ensure that statutory planning instruments deliver high-quality design and they should examine options to encourage good design through providing incentives in the planning approval process;
- State and territory governments should integrate their metropolitan land-use and transport planning processes to ensure that the delivery of new housing is located near transport infrastructure; and
- At the local level, governments should align the delivery of higher density developments with related upgrades to community infrastructure and amenities.

The Australian Government supports this recommendation, noting this is an area of state and territory government responsibility.

The Australian Government is delivering an ambitious infrastructure agenda with some \$50 billion of spending between now and 2019-20. This includes projects such as the:

- upgrade of the Monash Freeway in Melbourne's South East;
- completion of the M80 Ring Road upgrade in Victoria;
- construction of a second crossing of the Murray River between Echuca and Moama;
- WestConnex and NorthConnex in Sydney;
- Western Sydney Infrastructure Plan
- Pacific Highway Upgrade in New South Wales (NSW);
- Bruce Highway Upgrade Program in Queensland;
- Gateway Upgrade North in Queensland;
- Ipswich Motorway: Rocklea to Darra in Queensland;
- New Gold Coast Light Rail – stage 2;
- Completion of the Moreton Bay Rail Link, north of Brisbane
- North-South Corridor in Adelaide; and
- New Forrestfield Airport Link rail line in Perth's eastern suburbs.

This infrastructure investment is designed to stimulate productivity, improve access to domestic and international markets for our primary producers, help tradespeople serve their customers more efficiently, and reduce the work commute burden to give people more time with their families.



The Australian Government will work with all levels of government to improve urban amenity and connectivity, as outlined in the *Smart Cities Plan*. Encouraging more integrated development, including higher density development in the right areas, is a key focus. The Government is also working to raise awareness of telecommunications planning needs with other tiers of government and to work with them to implement complementary planning requirements for telecommunications infrastructure. For example, the Government's *Telecommunications Infrastructure in New Developments Policy*, which came into effect in March 2015, sets out the arrangements for providing telecommunications infrastructure in new developments.

In the land transport sector, the *Principles for Innovative Financing* require that governments assess the extent to which transport proposals align with land use planning strategies, including urban renewal and housing supply. The Joint Scoping Study on Western Sydney Rail Needs is a practical example of how the Australian and NSW governments are working together to examine the long term transport needs of Western Sydney, taking account of proposed infrastructure development (the Western Sydney Airport and associated roads) and population growth projections.

Recommendation 2.5

Governments should aim to grow the population of our smaller capital cities, in particular Adelaide, Hobart and Darwin beyond their current projections.

These cities offer access to impressive natural and built environments, high-quality infrastructure and services, cultural diversity and a skilled and dynamic workforce. We must ensure that we make the best use of these cities by growing their population and ensuring their continued economic prosperity.

The Australian Government supports this recommendation and supports the growth of other regional cities noting this is primarily an area of state and territory government responsibility.

The Australian Government will work with state and territory governments to identify investment opportunities and other ways to meet infrastructure needs, to attract and retain people in smaller capital cities.

The Australian Government notes that there are a range of regional cities of similar scale to our smaller capital cities – including for example Townsville, Launceston, Toowoomba, Geelong; and is committed to supporting the growth of these significant regional centres.

The Government's *Smart Cities Plan* recognises that all governments in Australia, and the private sector, have a role in ensuring the continued economic prosperity and growth of our cities. City deals will position our cities – both capital and regional – to realise their full potential through coordination governance, strategic planning, investment and reform.

The Government recognises the benefits of encouraging growth in our smaller capital cities, which can provide high standards of living, a range of employment opportunities and more affordable housing than our largest cities. As well as the smaller capitals, the Australian Government is committed to working with state and local governments encourage economic growth in regional cities, as demonstrated by the selection of Townsville and Launceston as locations for two of Australia's first three City Deals.

Recommendation 2.6

The cities of Newcastle, Wollongong, Geelong, the Sunshine Coast and the Gold Coast should be supported by governments, businesses and local communities to grow their populations and economies.

Access to new or upgraded infrastructure will be important in enabling these cities to develop strong economic and employment links with our bigger cities.

The Australian Government supports this recommendation and supports the full range of Australia's regional cities noting this is primarily an area of state and territory government responsibility.

The Australian Government will work with state and territory governments to identify investment opportunities and other ways to meet infrastructure needs to attract and retain people in these cities. The Government also continues its work to support the growth of Australia's many other substantial regional centres including funding of:

- \$1.5 million for the construction of a Community Hub at Emerald, Victoria;
- \$5 million for planning for rail duplications from Frankston to Baxter in Melbourne's South East and from South Geelong to Waurn Ponds, South West of Melbourne;
- \$6.685 million for the upgrade of Dubbo Airport and the aeromedical facilities project in NSW;
- \$5.6 million for the development of the Gawler Central Business District Hub in South Australia;
- \$5 million for Rockingham Beach Foreshore Revitalisation in Western Australia;
- \$743.4 million Australian Government commitment to the Bruce Highway – Caloundra Road to Sunshine Motorway;
- \$149.6 million to the Maroochydore Road Interchange Upgrade on the Sunshine Coast; and
- \$110 million Australian Government commitment to the M1 Pacific Motorway Mudgeeraba-Varsity Lakes Section Upgrade project on the Gold Coast.

The Australian Government will work with state governments to develop urban rail plans for Australia's five largest cities (including their surrounding regions). This work will include examining global trends and drivers of urban rail (including technology developments and changing demographic patterns) and linkages between rail and urban planning.

The Government's *Smart Cities Plan* recognises that all governments in Australia, and the private sector, have a role in ensuring the continued economic prosperity and growth of our cities. City deals will position our cities – both capital and regional – to realise their full potential through coordination governance, strategic planning, investment and reform.

Recommendation 2.7

Local government reform processes should be initiated across Australia to consolidate the number of councils and increase the efficiency, service quality, financial viability and strategic profile of local government.

A number of jurisdictions have reformed, or are currently reforming local government service delivery in Australia. State and territory governments should continue to monitor the adequacy of local governance arrangements and, where necessary, enact further reforms to increase the quality and viability of local government.

The Australian Government notes this recommendation, recognising that this is an area of state government responsibility.

The Australian Government supports processes to increase the efficiency (including regulatory efficiency), service quality, financial viability and strategic profile of local government. The Australian Government notes that the choice of particular policy instruments is a matter for state and territory governments.

Recommendation 2.8

Each state and territory government should deliver and consistently update long-term land-use plans for all Australian cities.

These plans should be integrated with corresponding infrastructure plans. To ensure the effective integration and implementation of these plans state and territory governments should explore what role institutional innovation, focused on delivering metropolitan governance, can play in supporting their implementation.

The Australian Government supports this recommendation in-principle, noting this is an area of state and territory government responsibility.

The Australian Government considers integrating transport infrastructure and land use planning essential in recognising the role of infrastructure investment and land use decisions in delivering economic policy and social policy outcomes.

As outlined in the *Smart Cities Plan*, integrated transport infrastructure and land use planning will be particularly important in managing urban population growth pressures. Land use planning and zoning decisions are central to the supply and location of housing in Australia's major cities. However, as well as identifying sufficient land for residential development, land use planning decisions need to take appropriate account of accessibility levels and transport demand. Several jurisdictions have already legislated, or are developing legislation, to require more integrated approaches to transport and land use planning. Policy in this area also needs to take account of environmental legislation.

The Government is also working with the state and territory governments to update the *Australian Transport Assessment and Planning Guidelines*, that outline best practice for transport planning and appraisal in Australia. The update includes incorporating new and updated guidance for integrated transport and land use planning to better support planning and infrastructure investment decisions.

3. Connectivity

Recommendation 3.1

Governments should upgrade legacy capital city passenger transport infrastructure to deliver higher capacity, high-frequency services across all modes.

To ensure funding is allocated to the right solutions, governments should adopt a modally agnostic methodology (where all infrastructure solutions are considered equally), and consider Infrastructure Australia's Infrastructure Priority List ahead of any funding decisions.

The Australian Government **supports this recommendation**, noting this is also a matter for state and territory governments.

In late 2015, the Australian Government committed to adopting a modally agnostic approach to addressing Australia's infrastructure needs, supporting the provision of funding for public transport projects where they have been assessed as the most appropriate option through a robust options analysis and project appraisal process.

The Government will continue to consider Infrastructure Australia's *Infrastructure Priority List* as part of its infrastructure project assessment process.

Recommendation 3.2

Data regarding the real-time operation, use and performance of Australia's transport networks should be made publicly available to enable the private sector to develop customer-focused mobile applications.

In a high-population, higher density city, public transport networks will need to transition to a model where commuters use an efficient combination of modes to complete a single journey. To assist this process, all governments should adopt an 'open data' policy and quickly release new data regarding the operation and performance of urban public transport networks.

The Australian Government **supports this recommendation**, noting this is a matter for state and territory governments as the network operators, and recognising that some data has already been released.

The Australian Government is committed to utilising emerging technology to undertake improved data collection from users that will lead to a better understanding of Australia's trade flows; benefit industry in the optimisation of their fleet; and be used by investors in infrastructure to identify where investment is required based on a comprehensive evidence base. That is why the Government will develop a technology plan to improve data collection from all users, the private sector and government across all transport modes. This will give policy makers, road users and investors a better understanding of what possibilities may exist.

The Government will also examine options for supporting projects which incorporate innovative use of transport technologies or data under the Smart Cities and Suburbs Program, due to commence in 2017.



This will strengthen the Government's strategic approach to identifying priorities and ensure its investment is well targeted.

As part of the *National Policy Framework for Land Transport Technology*, governments in Australia will collaborate to improve the availability of open data in the transport sector.

Recommendation 3.3

Governments should increase funding to address gaps in access to passenger transport on the outskirts of Australian cities.

Investments should prioritise high population areas and focus on the delivery of connecting transport infrastructure and services, which will deliver 'hub and spoke' connections, enabling these communities to more easily access mass transport networks.

The Australian Government supports this recommendation, noting that this is also a matter for state and territory governments.

As with all infrastructure, the Australian Government supports the provision of funding for public transport projects where they have been assessed as the most appropriate option to address transport network deficiencies.

For example, the Australian Government, in partnership with the New South Wales (NSW) Government, is undertaking a Joint Scoping Study on Western Sydney Rail Needs to determine the need, timing and service options for rail investment to service Western Sydney and the proposed Western Sydney Airport. This Study is jointly funded by the Australian and NSW Governments.

The Government recognises that improving the efficiency of public transport will require significant consultation with state and territory governments, as the principle provider of these transport services.

Urban rail infrastructure has the potential to transform key parts of our largest cities, efficiently connect large numbers of residents and jobs, move freight from road to rail reducing congestion, and enable private sector investment particularly through value capture approaches.

To better understand current and future rail needs, the Australian Government will work with state governments to develop urban rail plans for Australia's five largest cities (including their surrounding regions). This work will include examining global trends and drivers of urban rail (including technology developments and changing demographic patterns) and linkages between rail and urban planning, and its outcomes will better inform Government investment.

Recommendation 3.4

Australia needs a *National Freight and Supply Chain Strategy*. Infrastructure Australia, in partnership with governments and the private sector, should lead the development of the Strategy.

The Strategy should: map nationally significant supply chains and their access to supporting infrastructure and gateways; evaluate the adequacy of the institutional framework supporting freight networks; and recommend reforms and investments that will enable the more efficient movement of freight.

The Australian Government **supports** the development of a *National Freight and Supply Chain Strategy*, building on the existing work of the Australian, state and territory governments.

The National Land Freight Strategy (the Strategy) was agreed by the COAG Transport and Infrastructure Council in 2013, and the National Port Strategy was agreed by COAG in 2012. These Strategies brought a national focus to dealing with the growth in Australia's freight volumes; and were aimed at better integrating planning across government, industry and transport modes, supported by better data and performance measures, community engagement and complementary planning, investment and regulatory measures.

The Australian Government will update these strategies by developing an integrated national freight and supply strategy for reform and investment. To support this, the Government will undertake an independent inquiry to analyse how best to lift the productivity and efficiency of Australia's freight and supply chain infrastructure.

Ongoing work in this area by the Transport and Infrastructure Council will allow the Government to leverage its \$75 million investment in Data61 by providing for greater data consistency for the value of freight supply chains and for domestic freight generally, to inform infrastructure planning and investment. The Bureau of Infrastructure, Transport and Regional Economics is collating and consolidating freight data by mode and working with the Australian Bureau of Statistics (ABS) to develop innovative means of collecting road freight data from telematics and administrative data sources. The ABS is collaborating with Data61 on big data collection and analysis methods, which will inform this work.

Earlier this year, Australian governments published the first ever key freight route expenditure and investment plans, through the Transport and Infrastructure Council's Heavy Vehicle Road Reform work program. These plans profile intended maintenance expenditure and capital investments over the next four years by all levels of government on the key freight routes. Governments intend to update the plans on an annual basis, with future editions to feature improvements to the reporting methodology and to extend beyond these routes. The Transport and Infrastructure Council's work on protecting transport corridors and precincts will also play an important role in improving freight movements in Australia.

Recommendation 3.5

All governments should establish targeted investment programs focused on removing first and last mile constraints across the national freight network.

These investments should be informed by the findings of the recommended National Freight and Supply Chain Strategy.

The Australian Government **supports this recommendation**, noting that the existing *National Land Transport Act 2014* and the Infrastructure Investment Program settings support investment in projects with consideration of first and last mile constraints.

The *National Land Transport Act 2014* and the Infrastructure Investment Program settings provide for investment in projects with consideration of first and last mile matters. The Australian Government will work with jurisdictions, including local government, to identify priorities.

The Government notes that further analysis is required to determine if the establishment of a new grant program would be the most efficient mechanism to remove first and last mile network constraints. The Government will consult with state and territory governments on the need for a specific grant program to address these issues as part of ongoing work on the COAG Transport and Infrastructure Council's freight strategy.

The Australian Government will also work with state, territory and local governments to identify first and last mile priorities for investment.

Recommendation 3.6

The Australian Government should work with communities and business to maximise opportunities created by the National Broadband Network.

This will boost productivity and increase the efficiency of services and infrastructure. Government should lead the way by increasing the delivery of government services and information online.

The Australian Government **supports working with communities and business to maximise opportunities from the National Broadband Network.**

The Australian Government's \$29.5 billion equity investment in the National Broadband Network is aimed at fostering productivity and providing a platform for innovation to deliver economic and social benefits for all Australians, regardless of where they live. The construction and completion of the network will promote employment and business activity, including in remote areas with significant Indigenous populations.

The Government is taking the next steps to drive the practical and broad scale implementation of its Digital Transformation Agenda, and has established a strengthened Digital Transformation Office to lead it. The Government has also committed to delivering a digital transformation roadmap for government, and will prioritise high value services for digital transformation.

4. Regional

Recommendation 4.1

State and territory governments should deliver long term regional infrastructure plans.

These plans should:

- Identify gaps in infrastructure networks and identify priorities to support productive regional industries;
- Be developed with involvement from all levels of government to help coordinate investments and remove duplication;
- Provide transparency for the private sector to allow for government funding to be leveraged and private investment to be maximised; and
- Assess the potential for regions to ease pressure on our largest cities.

The Australian Government supports this recommendation, noting that this is a matter for state and territory governments.

The Australian Government supports the development of long-term state, territory and regional infrastructure plans that identify regionally important road and rail routes and utilise the principles endorsed by the *Australian Transport Assessment and Planning Guidelines*. A balance needs to be reached between supporting regions to meet their local infrastructure needs and facilitating their contribution to national productivity. The Government supports a consultative approach to the development of long-term regional infrastructure plans, with advice sought from regional bodies and local governments to enable objective regional level economic development planning.

The Government's *Smart Cities Plan* recognises the important role regional centres play in the long-term prosperity of our nation. They are the hubs of some of Australia's most important industries, including in the agriculture and resources sectors, and their ongoing prosperity is a core focus of the *Smart Cities Plan*.

The Government intends to develop a stream of City Deals specifically for regional cities. A competitive process will be used to select future regional City Deals, to ensure we deliver the greatest benefits and appropriately target the opportunities and challenges facing regional cities.

As indicated in Recommendation 3.4, earlier this year Australian governments published the first ever key freight route expenditure and investment plans, through the COAG Transport and Infrastructure Council's Heavy Vehicle Road Reform work program. These plans profile intended maintenance expenditure and capital investments over the next four years by all levels of government on the key freight routes. Governments intend to update the plans on an annual basis, with future editions to feature improvements to the reporting methodology and to extend beyond these routes. The Transport and Infrastructure Council's work on protecting transport corridors and precincts will also play an important role in improving freight movements in Australia.

Recommendation 4.2

The Australian Government should prioritise investment in regional infrastructure where the population is growing quickly and where the bulk of our regional economic growth can be found.

Efficient, liveable and productive regional hubs should be considered national economic assets and be a key priority of every level of government, including capitalising on opportunities to develop the north.

The Australian Government supports this recommendation in-principle, noting the linkages and the Government's support for recommendations under Population and Planning sections of the *Australian Infrastructure Plan*.

In line with all Australian Government expenditure decisions, infrastructure spending needs to be considered on its merits and in the context of the broader budget position. In particular, it is critical that governments select projects, through a robust assessment process. However, the Government recognises that, for equity reasons, infrastructure investment in Australia's regions may be required regardless of the region's population or economic growth rate, for example, to address existing infrastructure gaps and maintenance requirements. The Australian Government considers that regional infrastructure investment decisions should also recognise the future potential of centres which are presently smaller or slower growing. The Government is supporting growth in regional Australia through a variety of grant programs, including the National Stronger Regions Fund which provides \$1 billion over five years to fund priority infrastructure in regional communities. The new Building Better Regions Fund will replace the National Stronger Regions Fund to support infrastructure and community initiatives in areas outside of major cities. The new fund will assess projects in three categories depending on the size of the project. This will mean applications for smaller grants will not be competing with large projects for funding.

The Government has also committed to continue providing \$920 million annually (from 2019-20) for targeted program designed to support transport at the local and regional level. These programs include Roads to Recovery, Black Spot and the Heavy Vehicle Safety and Productivity Program, which are critical to the sustainability of Australia's extensive local road network and ensure better safety and access for local communities.

As well as providing grant funding for regional infrastructure, the Government has established the Northern Australia Infrastructure Facility (NAIF) an outcome of the Northern Australia White Paper, which is now operational with its headquarters in Cairns. The NAIF will offer up to \$5 billion in concessional finance to encourage and complement private sector investment in economic infrastructure that otherwise would not be built or would not be built for some time.

Rollout of the National Broadband Network has occurred more rapidly in regional areas as a result of the Government requiring NBN Co Limited to prioritise areas with poor broadband services. By October 2016, satellite services were already available, fixed wireless services were available to two thirds of homes and businesses to be served by this technology, and fixed line rollout in regional areas was proportionally ahead of rollout in metropolitan areas.

Recommendation 4.3

Regional infrastructure investment should respond to each community's particular needs, its changing demographics, and what is affordable.

Where governments are providing infrastructure in slower growing regions, they should make available information on how infrastructure is being used to address efficiency and equity issues, what taxpayers can expect in return and how such investments will be maintained over time.

The Australian Government supports this recommendation, noting it is largely an issue for state and territory governments.

The Australian Government considers regional priorities in its assessment of major regional infrastructure projects and grant programs such as the National Stronger Regions Fund. Productivity benefits, equity reasons and population growth rates are important factors. The Government recognises that investment is required in regions with varying levels of growth and that investment in slower growing regions may be required to address community service obligations, capacity issues and infrastructure gaps.

This is particularly important in Indigenous communities, where there are high levels of socio-economic disadvantage and cultural considerations in the delivery of infrastructure. The Government strongly encourages all Australian governments to maximise employment and business opportunities arising from infrastructure development, recognising the potential in addressing Indigenous disadvantage.

The new Building Better Regions Fund will support infrastructure and community initiatives in areas outside of major cities. The new fund will assess projects in three categories depending on the size of the project. This will mean applications for smaller grants will not be competing with large projects for funding.

As part of the 'Jobs and Growth in Regional Australia' policy the Government made an election commitment to deliver \$200 million in Regional Jobs and Investment Packages, targeting nine regions across Australia to help diversify regional economies, stimulate long-term growth and deliver sustainable employment. Regions will develop local investment plans which will identify regional priorities and help guide the Government's investment – including for local infrastructure projects.

Recommendation 4.4

The Australian Government should remove barriers to entry for mobile network providers in regional Australia to facilitate improvements in coverage, competition and service quality.

This should include:

- Considering the merits of modifying the existing fixed line Universal Service Obligation in regional areas toward improving mobile coverage;
- Where possible and appropriate, making National Broadband Network backhaul and towers available to mobile network providers; and
- Taking steps to encourage mobile network providers to co-locate their mobile infrastructure.

The Australian Government supports this recommendation in-principle to improve mobile coverage, competition and service quality in regional Australia.

The construction and completion of the National Broadband Network (NBN) will improve telecommunications in Australia, including in regional areas. The Government expects NBN Co Limited to make the NBN fixed wireless towers open to co-location from mobile network operators. As a result, mobile network operators have begun co-locating equipment on a number of NBN fixed wireless towers. NBN Co Limited has developed a Cell Site Access Product, which will enable it to leverage the Government's investment to deliver additional telecommunication service improvements in regional areas. In addition, the Government's Mobile Black Spot Program (rounds 1 and 2) encourages the sharing of mobile base stations and associated infrastructure by mobile network operators.

The Australian Government considers that the broader provision of terrestrial backhaul services is the responsibility of the telecommunications market. A regulated pricing regime for the provision of terrestrial backhaul is overseen by the Australian Competition and Consumer Commission (ACCC).

In its response to the 2015 Regional Telecommunications Review, the Australian Government announced a Productivity Commission (PC) inquiry into the future direction of a Universal Service Obligation (USO) in an evolving telecommunications market. The PC inquiry has commenced and a final report is due to Government by April 2017. The Government will consider the findings of the PC's inquiry in any decision making of future directions of USOs.

The ACCC commenced a declaration inquiry on 5 September 2016 into whether it should require mobile carriers to provide roaming on their networks. On 4 August 2016, the ACCC also announced the commencement of a market study that will examine existing and emerging competition and consumer issues in the communications sector, and may identify other areas of telecommunications reform.

Recommendation 4.5

The development of the proposed National Freight and Supply Chain Strategy should be informed by CSIRO's TRANSPORT Network Strategic Investment Tool (TRANSIT).

This tool should be used to identify the most efficient routes along major supply chains and to inform funding decisions on where strategic regional projects will have the most substantial economic impact.

The Australian Government supports the use of a range of data and analysis tools to inform its investment decisions.

Data and technology are critical to ensuring the Australian Government's investment in infrastructure projects deliver value for money. As part of the *Agricultural Competitiveness White Paper*, the Government provided funding for an expansion of the TraNSIT model to include an additional 25 agricultural industries to better inform future investment in transport networks. The TraNSIT model was also used to support project selection for Government's \$100 million Northern Australia Beef Roads Program.

TraNSIT will be one tool used to support the ongoing work on the national freight strategy by the COAG Transport and Infrastructure Council, which requires work to achieve greater data consistency for the value of freight supply chains and for domestic freight generally.

Recommendation 4.6

Governments should commit to increasing information on the feasibility, economic viability and sustainability of new water resource developments and infrastructure in priority catchments.

Water resource assessments will provide information to establish water management plans, allowing for better informed decisions about public and private investments and supporting further development of water markets.

The Australian Government supports this recommendation.

The Australian Government is working with state and territory governments on water reform through the implementation of the National Water Initiative. The Australian Government has also established the \$509.5 million National Water Infrastructure Development Fund. This includes \$450 million to support the construction of new water infrastructure, and \$59.5 million for 39 projects to fast track water resource assessments and feasibility studies. The assessments and studies will identify economically and environmentally viable water infrastructure projects that will supply secure and affordable water to grow regional economies.

Recommendation 4.7

Drinking water in all regional communities should meet the minimum standards in the Australian Drinking Water Guidelines.

State and territory governments should undertake an independent audit of the performance, financial viability and capacity constraints of local councils to identify areas of highest risk. In New South Wales and Queensland, these audits should inform pathways to more sustainable models, including consideration of:

Shared services;

Council amalgamations;

Transferring water operations to government-owned regional water corporations;

Outsourcing or franchising; and

Privatising water where commercially-viable.

Recognising the different governance arrangements in South Australia, Western Australia and the Northern Territory, governments should focus on achieving efficient water and wastewater services. In these jurisdictions, governments should commission independent audits to consider whether the single utility model delivers the highest achievable customer outcomes.

The Australian Government notes this recommendation, recognising that this is a matter for state and territory governments.

The Australian Government agrees that drinking water in all regional communities should meet the minimum standards in the *Australian Drinking Water Guidelines*. The Government acknowledges the link between funding local government agencies and the ongoing maintenance and quality of water resources. The Government encourages state and territory governments to identify areas of highest risk for action through audits of the performance, financial viability, and capacity constraints of local governments that could prevent water providers from meeting minimum standards.

In relation to the suggestion that there should be consideration of council amalgamations, to achieve this outcome, the Australian Government notes that council amalgamations are a matter for state and territory governments, consistent with our response to recommendation 2.7.

Efficient Infrastructure Markets

5. Funding

Recommendation 5.1

The Australian Government should require all project proponents seeking Australian Government funding to consider whole-of-life maintenance costs in their business case, and where possible they should be captured within the proposed contract structure.

Including a mandatory test for inclusion of maintenance costs within procurements will place a discipline on proponents seeking funding to understand, expose and account for the future maintenance needs of public infrastructure.

The Australian Government supports this recommendation in-principle, noting this approach exists for some economic infrastructure sectors.

The *Australian Transport Assessment and Planning Guidelines* explicitly require project proposal assessors to include maintenance and whole-of-life cost in the Benefit Cost Ratios. Project Benefit Cost Ratios and Benefit Cost Analysis are taken into account both when initially assessing proposed project commitments and before recommending approval of funding for specific works.

The Australian Government also requires jurisdictions to report on maintenance expenditure on the National Land Transport Network (NLTN) in order to receive their portion of the \$350 million that the Government provides for NLTN maintenance annually.

As the infrastructure owner and manager, jurisdictions are responsible for contracting individual projects and determining whether a contractual structure includes ongoing maintenance costs. The inclusion or exclusion of ongoing maintenance costs in contracts is considered by jurisdictions on a case-by-case basis, which allows jurisdictions to best manage the risks associated with the contracts. Where appropriate, the Government is supportive of proponents designing projects that optimise the whole-of-life costs.

Through the COAG Transport and Infrastructure Council, all Australian governments have established the National Guidelines on Infrastructure Project Delivery to assist jurisdictions and industry and drive best practice. The Guidelines were updated and re-published in early 2016.

Recommendation 5.2

Australia's public infrastructure asset owners should routinely use fixed-term maintenance contracts to deliver funding certainty for providers and better asset condition for users.

Depending on the characteristics of the particular network and service, it may also be desirable to include asset operations alongside maintenance contracts.

The Australian Government **supports this recommendation**, noting this is a matter for state and territory governments, local government, and other government entities.

The Australian Government considers that contracts should be chosen on the basis of best value for public funds, noting that this is a matter for the owners of public infrastructure.

Recommendation 5.3

The Australian Government should initiate a public inquiry, to be led by a body like the Productivity Commission or Infrastructure Australia, into the existing funding framework for roads and development of a road user charging reform pathway.

The public inquiry should consider:

Flaws in the existing charging framework – including fairness, financial sustainability and economic efficiency;

The optimal approach for road user charging and transport infrastructure funding in Australia;

The social implications of charging reform, including transitional and distributional impacts of replacing current taxation with direct user charges; and

A detailed reform pathway for transition to a full user pays model for roads covering the whole network and all users.

A public inquiry into road user charging reform should be supported by large-scale voluntary trials of road user charging options, funded by the Australian Government.

The Australian Government **supports this recommendation**, noting any framework will require consultation with state and territory governments.

Consistent with its response to the Harper Competition Policy Review in November 2015, the Australian Government is progressing work to investigate the benefits, costs and potential next steps of options to introduce cost-reflective road pricing for all vehicles. The work will include the development of a possible reform pathway and addressing fairness and equity issues through the development of Community Service Obligations and minimum service standards.

The Government will establish a study, chaired by an eminent Australian, to investigate the potential impacts of road user charging reform on road users. This study will help to inform governments' decision making on potential reform options and models, noting that the Australian Government does not intend to pursue reform options that do not deliver clear benefits for the community.

Recommendation 5.4

Federal, state and territory governments should commit to the full implementation of a heavy vehicle road charging structure in the next five years.

This reform must include the removal of all existing registration and usage charges under the PayGo model and the introduction of supporting regulatory and investment frameworks.

The Australian Government supports this recommendation, noting this is also a matter for consideration by state and territory governments.

Consistent with its response to the Harper Competition Policy Review in November 2015, the Australian Government is working with the state and territory governments to accelerate heavy vehicle road reform and investigate the benefits, costs and potential next steps of options to introduce cost reflective road pricing for all vehicles. Phase One of the COAG Transport and Infrastructure Council's Heavy Vehicle Road Reform is now complete, and is delivering improved transparency around road expenditure, investment and service delivery through the publication of heavy vehicle infrastructure asset registers and expenditure plans.

The Australian Government will progress next steps for heavy vehicle reform with state and territory governments through the development of a forward looking cost base; and a discussion paper to inform consultation on options for an independent price regulator.

Recommendation 5.5

Federal, state and territory governments should also commit to the full implementation of a light vehicle road charging structure in the next 10 years.

This reform must include the removal of all existing inefficient taxes – including fuel excise and registration charges – and the development of supporting regulatory and investment frameworks.

The Australian Government notes this recommendation which is also a matter for consideration by state and territory governments.

The Australian Government notes this recommendation but considers that until the inquiry, recommended in recommendation 5.3, is concluded and provides its report to government it is premature to express any views on the merits of recommendation 5.5.

The Government is progressing work to investigate the benefits, costs and potential next steps of options to introduce cost-reflective road pricing for all vehicles, including through the establishment of a study led by an eminent person.

The Government notes that Treasurers are working on a new competition and productivity-enhancing reform agreement including an updated set of competition policy principles drawing from, and expanding on, those recommended by the Harper Competition Policy Review. These competition principles will help guide ongoing reforms to the provision of critical infrastructure services.

Recommendation 5.6

The Australian Government should continue providing incentives for state and territory governments to improve the efficiency of their balance sheets by recycling appropriate publicly-owned assets to fund investments in productive infrastructure, and consider broader applications of incentive payments to advance reform.

Recycling capital represents a valuable reform and funding tool as it can help complete efficient regulated markets and release substantial capital to be reinvested in productive infrastructure.

The Australian Government supports this recommendation.

The Australian Government's Asset Recycling Initiative provided incentives for state and territory governments to transfer mature state government-owned assets to the private sector to unlock capital for productivity enhancing public infrastructure, subject to national interest (including national security considerations).

The Government will continue to look for future opportunities to implement similar programs subject to budget and Government priorities at the time.

Recommendation 5.7

Australia's state and territory governments should seek to increase the funding sustainability of public transport provision both through the pursuit of operating efficiencies and a more appropriate alignment of the funding burden between public transport users and taxpayers.

Recognising that public transport provides a range of benefits which accrue beyond the users, including through reduced road congestion and increased urban amenity, there is likely to be a continuing case for appropriate taxpayer subsidies over the medium and longer term.

The Australian Government supports this recommendation, noting that this is a matter for state and territory governments.

The Australian Government recognises that public transport has historically had a low rate of cost recovery from fares, and as a result there is a greater reliance on governments to provide grants to fund public transport projects. The Government therefore supports the need for a more sustainable funding model for land transport networks, including public transport, as well as assessing the opportunity to use value capture mechanisms to provide alternative funding streams to support public transport projects.

Given the complexities of increasing fares and the impact that may have on mode choice and longer term market reform, the Australian Government has identified this reform as needing consideration through the Council of Australian Governments. The COAG Transport and Infrastructure Council may have a role in progressing this recommendation.

To better understand current and future rail needs, the Australian Government will work with state governments to develop urban rail plans for Australia's five largest cities (including their surrounding regions). This work will include examining global trends and drivers of urban rail (including technology developments and changing demographic patterns) and linkages between rail and urban planning.



This work will provide a strong foundation for improving future public and private investment decisions, particularly where the viability of a project overall is dependent on urban planning outcomes such as increases in population density in key transport corridors.

Recommendation 5.8

The Australian Government should undertake a review of its capacity to use increased public borrowing to support an expanded economic infrastructure investment program.

Increased use of public debt to support investment can provide a smarter approach to delivering economic infrastructure, provided investments are well-considered, well-executed and make a definitively positive contribution to the economy. Public debt can also provide intergenerational equity around infrastructure investments by distributing costs between current and future taxpayers who will benefit from the provision of enhanced infrastructure.

The Australian Government supports this recommendation in-principle, noting the importance of considering all potential funding sources.

The Australian Government emphasises the importance of considering all potential funding sources, including from charges on beneficiaries (such as user charges or value capture mechanisms), to pay for infrastructure. In the case of many larger infrastructure projects, funding will necessarily involve multiple funding sources and levels of government.

Regardless of the funding and financing model selected, it is critical that governments select the right projects first, through consistent, robust assessment processes, before determining the most efficient funding and financing solution, otherwise there is a risk of funding being directed to support low quality projects.

It is also critical to recognise that decisions on the level of investment in infrastructure must be made in the context of broader budget considerations, and the ability of the Government and other jurisdictions to borrow.

Recommendation 5.9

The Australian Treasury should evaluate the viability of reporting debt under a more transparent structure, at all levels of government, to allow for greater clarity and support increased investment in productive infrastructure.

Reporting of debt should remain as transparent as possible. Further clarity about the composition of investments to which debt is allocated will increase public awareness of the valuable role borrowing can play in meeting Australia's infrastructure needs.

The Australian Government does not support this recommendation.

The Australian Government considers that this approach is likely to add complexity without commensurate transparency improvements.

Transparency of debt aggregates is already well defined within the existing financial framework.

Recommendation 5.10

Governments should routinely consider value capture opportunities in all future public infrastructure investments.

Opportunities for value capture should be identified and implemented early in planning processes, before specific options are developed, to maximise benefits to taxpayers. To encourage the application of value capture models, the Australian Government should impose a mandatory requirement for initiatives and projects seeking Australian Government support to demonstrate a consideration and implementation plan for value capture.

The Australian Government supports this recommendation.

This recommendation aligns with the Australian Government's *Principles for Innovative Financing* for the delivery of critical transport infrastructure, released in early 2016, which set out the Government's expectations around how projects are selected and funding and financing options are considered. The Principles encourage a focus on areas requiring reform and drive greater use of value capture by state, territory and local governments. The state and territory governments will be engaged to ensure these principles are put into practice when developing, prioritising and delivering critical transport infrastructure.

A key consideration for all governments will be which value capture mechanisms to use and how to ensure beneficiaries are not charged multiple times. This is why the Government released its *Discussion Paper: Using Value Capture to Help Deliver Major Land Transport Infrastructure* on 16 November 2016. This paper outlines a range of value capture approaches, and seeks feedback on how the Australian Government could use its various policy and funding levers to further stimulate the use and development of value capture.

An example of value capture currently being considered is through the Australian Government and NSW Government's Joint Scoping Study on Western Sydney Rail Needs, which is investigating opportunities as a partial funding source for any potential investments in the new rail infrastructure.

6. Competitive Markets

Recommendation 6.1

Where a competitive market for supply of infrastructure services exists, or could exist, governments should efficiently exit direct service provision, allowing the market to allocate supply to meet demand.

Where the conditions exist for multiple suppliers to meet the needs of multiple consumers through an open, transparent and competitive framework, there is no compelling case for continued direct participation by governments in those markets.

The Australian Government **supports this recommendation in-principle**, noting this is also a matter for state and territory governments.

In April 2016, the Council of Australian Governments agreed that Treasurers develop a new competition and productivity-enhancing reform agreement including an updated set of competition policy principles drawing from, and expanding on, those recommended by the Harper Competition Policy Review. These competition principles will help guide ongoing reforms to the provision of critical infrastructure services.

Recommendation 6.2

Where commercially-viable monopoly infrastructure remains in public ownership, governments should define an appropriate independent regulatory framework which protects consumers and taxpayers, before divesting those assets into a well-functioning, well-regulated market.

Where infrastructure is not commercially-viable, and government determines that there is limited prospect of near-term commercial viability, governments should have a default position of defining the service offering and testing the market for contestable supply.

The Australian Government **supports this recommendation in-principle**, noting this is also a matter for state and territory governments.

As outlined in its response to the Harper Competition Policy Review, the Government supports the principle that governments should separate public monopolies from competitive service elements, and also separate contestable elements into smaller independent business activities. This is subject to a public interest test such that legislation or government policy should not restrict competition unless the benefits of the restriction to the community as a whole outweigh the costs; and the objectives of the legislation or government policy can only be achieved through restricting competition.

As noted in its response to recommendation 6.1, the Government is working with state and territory governments through the Council of Australian Governments to develop a new competition and productivity-enhancing reform agenda including an updated set of competition principles drawing from, and expanding on, those recommended by the Harper Competition Policy Review. These competition principles will help guide ongoing reforms including the provision of critical infrastructure services.

Recommendation 6.3

Infrastructure community service obligations should be well-defined, transparently disclosed to the community, paid for by taxpayers rather than other users and, wherever possible, exposed to a competitive process to ensure services are routinely delivered at the right level, for an efficient price.

Currently, most community service obligations are hidden or their funding is determined without clear and transparent objectives, resulting in poor service outcomes and imposing inefficient costs on taxpayers.

The Australian Government **supports this recommendation**, noting that the provision of information will need to consider privacy and commercial-in-confidence principles.

For example, for provision of water supply and related services, the National Water Initiative includes principles for efficient pricing and the provision of Community Service Obligations where necessary. The Australian Government is working with state and territory governments to encourage continued implementation of National Water Initiative principles for the pricing of water and transparency in the management of Community Service Obligations for water services.

Recommendation 6.4

All governments should transfer their remaining publicly-owned electricity generation, network and retail businesses to private ownership.

Public ownership of commercial businesses, including monopolies in well-regulated markets, distorts outcomes, stifles competition and harm consumers.

Priorities include:

- All remaining retail and generation businesses in public ownership should be prepared for sale, including Snowy Hydro; and
- Queensland, Western Australia, Tasmania and Northern Territory should begin the process of explaining the need for reform to the community, with a view to divesting all electricity network assets. New South Wales should articulate a pathway to a full sale as soon as practically achievable following the partial lease process currently underway.

The Australian Government **notes this recommendation**, recognising that while the Australian Government has a national leadership role to play in regard to energy policy and related national security interests, ownership of publicly-owned assets is generally the responsibility of the relevant state and territory governments.

The Australian Government supports the privatisation of government-owned energy assets where this results in greater economic efficiency, improved services for the community and is consistent with Australia's national security interests. While the Government has a national leadership role with regards to energy policy, state and territory governments retain particular responsibilities, including retail energy pricing and ownership of their assets. Decisions on the sales of individual energy assets are therefore a matter for respective state and territory governments.



The Government's Asset Recycling Initiative has provided incentives to state and territory governments that sell existing assets and reinvest in new economic infrastructure. The Australian Government will work closely with governments to protect national interests, including national security, during the privatisation process.

The Government holds a shareholding of 13 per cent in Snowy Hydro with the NSW and Victorian Governments holding the remaining 58 per cent and 29 per cent respectively. The Government has no plans to sell its share in Snowy Hydro.

Recommendation 6.5

Governments, through the COAG Energy Council and the Australian Energy Market Commission, should introduce more flexible network tariffs in the near term.

Governments should publicly renew their commitment to this reform and work with relevant bodies to communicate the consumer benefits of a more flexible tariff arrangement.

The Australian Government supports this recommendation.

The *National Electricity Rules* have been revised to improve how network tariffs are set and structured. Based on the revised rules, network businesses have submitted statements to the Australian Energy Regulator that outline their tariff structures for the coming regulatory periods and include flexible (demand) tariffs available from 2017 for those customers with the appropriate metering.

Recommendation 6.6

The Australian Energy Market Commission, in cooperation with governments, should develop electricity metering competition to facilitate the efficient, market-led rollout of smart metering technologies, taking into account positive and negative lessons from Victoria.

Smart meters will support more flexible and efficient electricity tariff arrangements.

The Australian Government supports this recommendation.

Under the direction of the COAG Energy Council, the Australian Energy Market Commission finalised the *National Electricity Rules* for a competitive metering framework in November 2015. The market metering framework is due to commence in December 2017.

Recommendation 6.7

Australia's electricity and gas markets should move to full retail price deregulation as soon as practically possible.

To support this:

- Where price deregulation has not occurred in the retail electricity market, the Australian Energy Market Commission should provide advice and a pathway for removing price regulation; and
- The Australian Government should undertake a review to identify ways to increase competition in the retail gas market (consistent with the Harper Review).

The Australian Government supports this recommendation.

The COAG Energy Council is committed to ensuring that energy markets promote efficient investment in, and efficient operation and use of, electricity and gas services for the long-term interests of consumers. Jurisdictions have agreed through the COAG *Australian Energy Market Agreement* to introduce full retail price deregulation where effective competition can be demonstrated.

The COAG Energy Council agreed on 19 August 2016 to a comprehensive domestic gas market reform package to lift competition, based on the Australian Competition and Consumer Commission and Australian Energy Market Commission reports. This will mean more gas at lower prices, including better information for trading in the market; creation of trading hubs in the north and south; easier access to transport infrastructure; better pricing information; and encouraging more gas supply and more gas suppliers, taking account of each jurisdiction's circumstances.

Recommendation 6.8

Governments and regulators should evaluate the likely impacts of emerging and disruptive technologies on the national electricity market and recommend specific reforms to address potential regulatory failure and technology disruption.

Government and business leaders should work together to guide the transition in a way that creates community and business confidence.

The Australian Government supports this recommendation.

The Australian electricity market is undergoing a significant transition, including due to rapid technological change. The COAG Energy Council commissioned Dr Alan Finkel AO to develop a national reform blueprint to maintain energy security and reliability in the National Electricity Market, in light of the transition taking place.

In addition, the COAG Energy Council has initiated a strategic work program to address issues relating to technology, innovation and market change identified through a stress testing exercise conducted in early 2015. The strategic work program aims to ensure regulatory frameworks are ready to cope with the effects of emerging technologies and enable consumers to benefit from innovative services while mitigating risks. The program is considering issues such as which services require regulation and should be opened to competition, and the flexibility of the regulatory framework for electricity networks to accommodate decentralised supply options.

Recommendation 6.9

NBN Co should be privatised into an appropriately regulated market in the medium term.

In the near term, the Australian Government should commission a scoping study to assess the most appropriate approach, structure and timing to deliver a privatised NBN model. The scoping study to assess the most appropriate approach and structure for a privatised NBN should include options to efficiently support delivery of NBN services in regional and remote areas that are non-commercial.

The Australian Government supports this recommendation in-principle, noting current legislation provides the framework and process for privatisation.

The current legislation includes a requirement that before privatisation, the network is declared built and fully operational and an inquiry by the Productivity Commission occurs, to consider the regulatory framework for the National Broadband Network, the impact of privatisation on affordability of services and the impact of privatisation on competition.

Recommendation 6.10

Governments should define a pathway to transfer state-owned metropolitan water utility businesses to private ownership to deliver more cost-effective, customer-responsive services.

That pathway will:

- Implement policy and institutional reforms to promote competitive neutrality in advance of privatisation, including full cost recovery pricing and commercial rates of return on capital;
 - Introduce independent economic regulation, with the potential for the regulatory framework to be set nationally to avoid perceived conflicts of interest; and
 - Apply uniform drinking water quality and environmental regulation.
- These reforms should be delivered within five years.

The Australian Government notes this recommendation, noting this is a matter for state and territory governments.

The Australian Government will work with state and territory governments to further progress reforms to develop and strengthen economic regulation and pricing mechanisms in urban water consistent with National Water Initiative principles. This issue was also considered in the Government's response to the Harper Competition Policy Review.

Recommendation 6.11

The Murray-Darling Basin Authority should undertake a comprehensive investigation into issues inhibiting the efficient functioning of water markets in the Murray-Darling Basin including information and transparency, trade processing times and register compatibility.

COAG should recommit to establishing entitlements consistent with the National Water Initiative in areas where this has not yet occurred, such as in priority catchments in northern Australia.

The Australian Government supports this recommendation in-principle, noting jurisdictions and the Murray Darling Basin Authority release regular reviews of key elements and advance notice of changes.

The Murray Darling Basin Authority (MDBA) and Australian Competition and Consumer Commission (ACCC) each have specific responsibilities for matters relating to Murray Darling Basin water market functioning and transparency under the Water Act 2007 (the Act) and Murray-Darling Basin Plan (the Basin Plan).

All state water resource plans in the Basin are required to be compliant with the Basin Plan. As the agency with ongoing responsibility for the Basin Plan Water Trading Rules, a key role of MDBA is to assess state Water Resource Plans for compliance with the rules before recommending to the Minister that Water Resource Plans are able to be accredited as compliant with the Basin Plan. In addition, the MDBA will also release an assessment in 2017 on the facilitation, by efficient and effective water markets, of tradeable water rights reaching their most productive use.

In order to qualify for annual payments under the National Partnership Agreement on Implementing Water Reform in the Murray-Darling Basin (2013), Basin states must submit an annual statement of assurance that milestones set out in the Agreement have been met. Much of the content of Milestone 6 covers the extent to which states are compliant with Basin Plan Water Trade Rules. In assessing states' compliance with their commitments the Department of Agriculture and Water Resources consults with the MDBA.

Under the Act, the ACCC is responsible for developing and administering water charge and water market rules, each of which are important to ensuring the efficiency and transparency of the Basin water market. In accordance with the Government Response to the Independent Review of the Water Act, the ACCC has conducted its review of water charge rules and has provided its advice to the Minister for Agriculture and Water Resources.

The Australian Government notes that Basin States have largely met the existing COAG water trade processing standards, and encourages improvement in their performance against the standards. The Government is committed to the continuous improvement of water information products, and encourages state and territory governments to explore opportunities to build on work from the National Water Markets System to improve register compatibility.

The Government is working continuously to improve the functioning and reporting of water markets and defined water resource areas both inside and outside the Murray-Darling Basin.



The Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) conducts water-related research, including collecting and analysing water data and providing advice on how government policies influence the agricultural sector. Reports produced by ABARES in 2016 will include Australian Water Markets Reports for 2013-14 and 2014-15.

The Government has also committed funding to undertake water resource assessments in priority catchments in northern Australia through the National Water Infrastructure Development Fund. This work will inform the establishment of entitlements in these catchments, consistent with the National Water Initiative.

The Government supports further investigation of the tradability of water, including water comprised within environmental flows.

Recommendation 6.12

The Australian Government should work with state and territory governments to establish an independent national body to deliver a National Water Reform Plan and drive market reforms across the metropolitan and regional water sectors.

Water is critical to Australia's economic prosperity and environment, and to our social and cultural life. The plan should build on the success of the National Water Initiative, and the body which will deliver it should energise governments and communities to take actions needed to progress national water resource management over the coming decade.

The Australian Government does not support the establishment of a new independent national water body.

The Australian Government does not support the establishment of a new national independent body nor the development of a new 'National Water Reform Plan' which would duplicate the ongoing implementation by state and territory governments of the National Water Initiative (NWI). The NWI sets out key water reform principles that drive reform across all aspects of water management and provide a transparent business and regulatory environment to encourage investment in water infrastructure. With the abolition of the National Water Commission, the Government tasked the Productivity Commission to undertake the key audit and review functions required under the NWI and Water Act 2007. The Australian Government will continue to work with state and territory governments to drive reform of water markets through the implementation of the NWI objectives.

Recommendation 6.13

Australia should seek to transition the revenue and funding framework for roads to be consistent with other utility networks by establishing a corporatized delivery model.

A regulated asset base approach provides a strong framework to achieve this outcome. As part of the broader public inquiry into road funding reform, the Australian Government should direct a body like Infrastructure Australia or the Productivity Commission to:

- Research the merits of a corporatised model for Australia's road network(s) to establish a reform pathway over the medium term; and
- Evaluate and define the pathway to establish the corporatised road fund model in jurisdictions, including provisions for hypothecation of existing taxes and charges to support the delivery of transport infrastructure in advance of the introduction of user charging.

This work should be delivered in tandem with heavy vehicle charging and investment reform.

The Australian Government notes this recommendation and is undertaking further investigation.

Consistent with its response to the Harper Competition Policy Review, the Australian Government is working with state and territory governments to accelerate heavy vehicle road reform and to investigate the benefits, costs and potential next steps of options to introduce cost-reflective road pricing for all vehicles. Accordingly, the Government supports this recommendation in relation to heavy vehicles. In relation to light vehicles the Government notes the recommendation but considers that until the inquiry discussed at recommendation 5.3 is concluded and provides its report to government it is premature to express any view on the merits of recommendation 6.13 as it would apply to light vehicles.

Recommendation 6.14

Governments should adopt a default option of exposing public transport services to contestable supply through franchising.

The focus of reform should be to improve customers' experience by exposing delivery to contestable supply and selecting the best operator to provide services. Private operation of public transport through time limited, exclusive franchises – where providers compete to deliver services – is a proven model both in Australia and overseas in raising service quality and value for money for customers. It should be the default option for public transport provision, with capital city bus and rail services as immediate candidates for franchising.

The Australian Government supports this recommendation, noting this is primarily a matter for state and territory governments.

The Australian Government supports private sector involvement in infrastructure delivery, where cost-effective, noting that the provision of public transport services is primarily a matter for state, territory and local governments. Where appropriate, franchising should be used to support the delivery of public transport services. This is a potential role for the COAG Transport and Infrastructure Council.

Sustainable and Equitable Infrastructure

7. Sustainability and Resilience

Recommendation 7.1

Australia's energy and transport sectors should deliver emissions reductions in line with international commitments.

While some progress has been made, considerable further action is required for our infrastructure to play its part in helping Australia meet its obligations and aspirations. Governments of all levels should consult with industry and clearly communicate reforms to allow the private sector to find the lowest cost pathway to reducing their environmental impact over time.

The Australian Government supports this recommendation.

The Australian Government has a comprehensive and enduring set of policies to address climate change. These policies have us on track to achieve our 2020 emission reduction target and are already making headway on our 2030 target.

These include the Renewable Energy Target, which will result in 33,000 gigawatt-hours of large-scale renewable electricity by 2020; \$10 billion in support for deploying renewable energy through the Clean Energy Finance Corporation; \$1.2 billion of Australian Renewable Energy Agency funding already committed to support renewable energy projects and \$800 million of additional funding available; Emission Reduction Fund methods to support businesses reduce their emissions, and the Safeguard Mechanism to prevent significant increases in beyond business-as-usual emissions from large emitters.

On 4 December 2015, the COAG Energy Council released the National Energy Productivity Plan (NEPP) and initial work plan of measures. The work plan contains 34 measures, and covers the first steps in the 15-year life of the NEPP, including measures to support:

- more productive consumer choices through tools and information that make choosing energy services, equipment, buildings and vehicles easier (like apps and labels), engaging large consumer action and more efficient incentives (like more cost-reflective pricing);
- more productive energy services through innovation, competitive modern markets and efficient standards. This includes work to improve light vehicle efficiency, being led by the Vehicle Emissions Ministerial Forum.

The National Energy Productivity Plan is expected to contribute more than a quarter of the savings required to meet Australia's 2030 greenhouse gas emissions reduction target.

Recommendation 7.2

Building on the Energy White Paper, governments should work with the private sector to develop a cohesive strategy for supporting a transition to a lower emissions electricity generation sector at lowest cost to users and taxpayers.

Governments should continue to encourage innovation and growth in renewable and lower emissions technologies and other developments to reduce emissions. Regulatory barriers to entry for decentralised energy sources should be lessened and, where necessary, governments should support the commercial viability of developments through co-investment of projects through research and demonstration phases.

The Australian Government supports this recommendation.

The Government notes that there are extensive policies in place to support a transition to a lower emissions electricity generation sector at lowest cost to users and taxpayers. This follows from the Energy White Paper and continuing policy activity.

Through the COAG Energy Council, Commonwealth, state and territory energy ministers agreed to a national, cooperative effort to better integrate energy and climate policy, with a clear focus on ensuring that consumers and industry have access to low-cost, reliable energy as Australia moves towards a lower-emission economy.

At its meeting on 7 October 2016, the COAG Energy Council also agreed to an independent review of the National Electricity Market to develop a blueprint to maintain energy security and reliability in light of the transition to greater renewable energy, a more decentralised generation system and changing consumer demand.

The COAG Energy Council has also endorsed a work program on energy market transformation, to ensure regulatory frameworks support the successful transition of the electricity market, driven by consumer choices and new technologies including decentralised energy sources.

The Australian Government is also supporting lower emissions in the generation sector through the Emissions Reduction Fund (ERF), safeguard mechanism and the Renewable Energy Target (RET). The ERF provides opportunities for generators and electricity users to gain funding for their emission reduction projects, while the safeguard mechanism is designed to prevent significant increases in beyond business-as-usual emissions from the large emitters, including the electricity sector. The RET will result in a total of 33 GWh of generation coming from large scale renewable generation by 2020.

Both the Australian Renewable Energy Agency (ARENA) and the Clean Energy Finance Corporation (CEFC) play an important role in supporting emerging clean energy technologies across the spectrum of research and development, demonstration and deployment. This includes renewable and low emissions technologies for electricity generation. As at October 2016, ARENA has committed approximately \$1.2 billion to 252 projects along the innovation chain. By the end of financial year 2014-15, the CEFC had investment commitments of \$1.2 billion. These investment commitments contribute to projects and programs with a total value of around \$3.5 billion.

The Government will be considering Australia's emissions reduction policies in detail in 2017. It will do so in close consultation with businesses and the community. One input to this 2017 review will be a Low Emissions Technology Roadmap, commissioned by the Government to identify some mixes of low emissions technologies that could allow Australia to meet its emissions reductions targets.

Recommendation 7.3

Australia's light and heavy vehicles should keep pace with global best practice efficiency and emissions standards.

The Australian Government should update and enforce standards to minimise emissions from road vehicles. Ensuring consumers are informed of the relative efficiency and emissions of new vehicles will be essential to driving more sustainable consumer behaviour.

The Australian Government supports this recommendation.

A Ministerial Forum on Vehicle Emissions has been established to explore ways to reduce vehicle emissions, including through regulation and the development of standards. This will include considering the costs and benefits of efficiency and emission standards. The Ministerial Forum will report to the Government in 2017 on a draft implementation plan for new measures.

The National Transport Commission will also continue to provide an annual report on the carbon dioxide emissions of new passenger and light commercial vehicles sold in Australia.

Recommendation 7.4

Where this has not already begun, state, territory and local governments should demonstrate integration of active transport strategies through transport and land-use planning.

Governments should provide active transport that is connected, accessible and safe, and encourage shifts to more efficient, sustainable transport options to improve transport sustainability and provide greater public amenity.

The Australian Government supports this recommendation, noting this is a matter for state, territory and local governments.

The Australian Government's *Smart Cities Plan* recognises that integrated active transport improves transport accessibility and efficiency, while also improving liveability outcomes. While these matters are primarily matters for state, territory and local governments, the Australian Government supports active transport through funding to local governments and associated road projects. For example, the Gateway Upgrade North project in Brisbane has integrated on-off cycle and pedestrian facilities included as part of the approved scope for the project. Similar features are included on the Perth Freight Link (Roe 8) project and the North-South Road Corridor upgrade in Adelaide.

The *Australian Transport Assessment and Planning Guidelines*, approved by the COAG Transport and Infrastructure Council in August 2016, provide guidance on integrated transport and land use planning to address a city or region's longer-term challenges and coordinating investments and policy decisions to achieve that vision. The Guidelines also provide guidance on undertaking economic appraisals of active travel which provides practitioners with best practice for establishing planning and associated activities.

Recommendation 7.5

Infrastructure owners and operators should develop and maintain strategies to improve the resilience of infrastructure, and minimise the costs of mitigating risks by considering resilience within whole-of-life cost projections.

Regulators should ensure that responses to threats are proportionate and efficient. The costs of managing risks should reflect consumer preferences, balancing pricing and reliability considerations.

The Australian Government **supports this recommendation**, noting that it aligns with the Australian Government's *Critical Infrastructure Resilience Strategy* and the *National Strategy for Disaster Resilience*.

The Australian Government supports infrastructure owners and operators developing strategies to improve the resilience of infrastructure, and minimise the costs of mitigating risks by considering resilience within whole-of-life cost projections.

The aim of the Government's *Critical Infrastructure Resilience Strategy*, which promotes organisational resilience across a number of sectors including energy, food, water, transport, and communications, is the continued operation of critical infrastructure in the face of all hazards. The Government works closely with industry under the Strategy to achieve this aim. This approach recognises that owners and operators are best placed to assess and manage risks to their operations. However, in relation to security risks, owners and operators should engage with relevant government agencies to ensure their risk assessments are adequately informed.

In addition, the *National Strategy for Disaster Resilience*, endorsed by COAG in 2011, promotes a whole-of-nation resilience based approach to disaster management. It also outlines that resilience is a shared responsibility of governments, communities, business and individuals. This strategy provides high level guidance on disaster management across identified priority areas to build disaster resilient communities, including enhancing disaster risk mitigation and improving infrastructure resilience to all hazards.

Recommendation 7.6

Australia's energy and water supplies should be resilient to market and environmental changes and risks.

Governments should maintain oversight of energy and water markets to ensure the incentives of service providers in managing risks are appropriately aligned with consumer needs.

The Australian Government **supports this recommendation**.

As part of the Australian Government's *Critical Infrastructure Resilience Strategy*, the Trusted Information Sharing Network (TISN) for critical infrastructure resilience (a business-government partnership) provides an information sharing forum that helps to ensure the continued operation of critical infrastructure, such as water and energy, in the face of all hazards, including market and environmental changes and risks. Energy and water are two of the eight critical infrastructure groups within the TISN.



Both the Energy Sector Group and Water Services Sector Group contribute to the development of sectors where owners and operators and governments learn, share and work together (across the entire supply chain from raw material to market) to maintain a high level of resilience against all hazards for the benefit of consumers, industry and the Australian economy.

The Australian Government notes that effective tools to achieve this outcome including increasing water storage facilities such as dams and the use of the Water Infrastructure Development Fund.

8. Remote and Indigenous Communities

Recommendation 8.1

To improve planning, coordination and delivery of infrastructure investments in remote and very remote regions, governments should:

- Commit to the ongoing integration of essential service delivery and associated infrastructure investment via existing local government frameworks, along with an increased state and territory government focus on service delivery;
- Draw on best practice principles for delivering remote infrastructure by working with communities, sharing information, developing common goals, pooling resources, developing and implementing consistent procurement frameworks and adopting performance benchmarks based on community expectations; and
- Consider tendering the provision of economic infrastructure services and assess the merits of pooling investments across communities to establish scale and attract more private sector interest and innovation – for example, tendering water and wastewater infrastructure services in suitable clusters of remote and very remote areas to increase quality to minimum standards and extract greater value for money.

The Australian Government **supports this recommendation**, noting that this is also a matter for state and territory governments. The Australian Government has reached agreement with most state and territory governments that the delivery of municipal and essential services in remote Indigenous communities would be a state and territory responsibility.

The Australian Government is making significant investments to improve infrastructure in northern Australia, to support growth and productivity, including in remote communities.

For example, as discussed in the response to recommendation 4.2, the Northern Australia Infrastructure Facility (NAIF) will offer up to \$5 billion in concessional finance to encourage and complement private sector investment in economic infrastructure that otherwise would not be built or would not be built for some time. This support for transformative economic infrastructure will be a significant step for the longer term expansion of the economy and population in northern Australia.

The NAIF, which is headquartered in Cairns, is engaging with all relevant stakeholders, including local councils and Indigenous stakeholders, in the process of ensuring community engagement and that the regulatory requirements are satisfied when assessing project proposals.

The Government strongly encourages options to increase opportunities for Indigenous employment and supplier use.

In November 2015, Australia's transport ministers, through the COAG Transport and Infrastructure Council, agreed to a *National Remote and Regional Transport Strategy*. The aim of the Strategy is to maximise investment opportunities in transport infrastructure and services, minimise regulatory burden, improve coordination across borders and governments, and influence policy development relevant to remote and regional transport.



The Strategy identifies 11 key actions including work to:

- investigate and facilitate opportunities for private sector investment developer contributions to support remote and regional transport infrastructure construction projects;
- consider funding and financing options for remote and regional projects;
- explore centralised administrative and service delivery approaches for remote aerodromes;
- provide employment and economic opportunities for local communities on key transport infrastructure construction and maintenance projects;

A number of the Strategy's actions have been completed.

Recommendation 8.2

Renewable energy should replace diesel generation in remote communities wherever it is affordable and efficient to do so.

Electricity service providers, communities and governments should work together to find cost-effective options for renewable energy generation. This will improve the reliability and self-sufficiency of energy supply to remote communities, reduce costs of fuel and its transportation, and support training of local communities in the operation and maintenance of generation facilities.

The Australian Government supports this recommendation, noting that this is also a matter for state and territory governments.

The Australian Government supports service providers and affected remote communities and businesses transitioning to renewable energy where it improves the reliability and self-sufficiency of their energy supply and reduces costs. The Australian Government is providing financial support to 14 renewable energy demonstration projects in remote off grid areas of Australia through the Australian Renewable Energy Agency (ARENA). ARENA funds activities that are expected to advance renewable energy technologies towards commercial readiness, improve business models or reduce overall industry costs. These projects include the integration of solar photovoltaic systems into existing diesel generation at remote mine sites and indigenous communities (sometimes including enabling technologies such as batteries, flywheels or cloud predictive technologies), which aim to reduce the cost of electricity generation in these areas.

New projects which build on this demonstration effect can apply to ARENA for funding. Knowledge gleaned from these projects will be shared with other indigenous communities, remote network operators and mining companies to drive future deployment without the need for government subsidy.

Recommendation 8.3

Governments should develop coordinated strategies with remote communities to remove barriers and maximise the benefits of the National Broadband Network and the opportunities it enables for households and businesses.

These plans should consider the necessary support and training that communities require to take advantage of health, education and business opportunities via the National Broadband Network.

The Australian Government supports this recommendation in-principle, noting this also a matter for state and territory governments.

The Australian Government is working closely with NBN Co Limited to develop appropriate deployment options. These will support remote communities such as Indigenous communities and isolated students to connect to, and maximise the benefits of, the National Broadband Network. The Government supports options to increase opportunities for Indigenous employment and supplier use during this process.

Recommendation 8.4

Governments should consider infrastructure investments that support reforms to increase the economic independence of remote Indigenous communities.

Reforms should take into account the findings and recommendations of the COAG Investigation into Indigenous Land Administration and Use, and draw on the Commonwealth Indigenous Procurement Policy and the White Paper on Developing Northern Australia's commitment to piloting land tenure reforms and improving land administration.

The Australian Government supports this recommendation, noting this is also a matter for state and territory governments.

The Australian Government is working with state and territory governments and Aboriginal and Torres Strait Islander stakeholders to improve land administration and use by implementing the findings and recommendations of the COAG Investigation into Indigenous land administration and use (the Investigation) and the White Paper on Developing Northern Australia.

The Investigation makes recommendations to support Indigenous peoples' use of their rights in land and waters for economic development. These include recommendations that go to reducing red tape arising from overlapping types of Indigenous land tenures, removing legislative barriers to bankable long-term leases, supporting native title determination processes and better engagement between governments and Indigenous land owners and also with particular sectors such as the banking industry. The Council of Australian Governments agreed jurisdictions would implement the recommendations of the Investigation's report, subject to their unique circumstances and resource constraints. The Commonwealth Minister for Indigenous Affairs will report back on implementation of the recommendations after 12 months.



Under the White Paper, the Government has allocated \$10.6 million over four years to support a small number of land tenure reform pilots. The pilots will broaden commercial development on land in northern Australia and increase the diversity of activity in business and Indigenous communities.

In implementing the White Paper on Developing Northern Australia, the Government will work with jurisdictions to achieve Indigenous employment and/or supplier use targets in road and other relevant projects in the North, which will reflect the working age Indigenous population in the part of the jurisdiction that falls within northern Australia.

The Government's Indigenous Procurement Policy requires Commonwealth construction contracts above \$7.5 million to achieve minimum levels of Indigenous employment and/or supplier use. Under this policy, Indigenous businesses must be given the opportunity to quote first on Commonwealth contracts delivered in remote areas.

The Australian Government will work with state and territory governments and the private sector, to develop a more ambitious and strategic approach to improve Indigenous employment in the context of land transport infrastructure projects, including by exploring the application of Indigenous employment and supplier use targets for infrastructure projects.

Recommendation 8.5

Governments and private sector proponents should liaise with remote communities to better understand unique local characteristics and ensure infrastructure projects best meet their needs.

Remote communities can identify priority needs and suitable approaches to implementation tailored to local circumstances.

The Australian Government supports this recommendation, noting that this is also a matter for state and territory governments.

The Australian Government recognises that investment in infrastructure has the capacity to stimulate remote economies and open up new markets and can contribute to better, lasting outcomes for Australians living in remote communities, including Indigenous people.

For example, the Government is consulting appropriately with local industries that operate in remote communities, such as with the beef cattle and transport industries, in implementing the Northern Beef Roads Program.

The Government is working closely with jurisdictions to encourage local participation in the delivery of infrastructure in remote communities, and strongly encourages options to increase Indigenous employment and the use of Indigenous suppliers.

Better Decisions and Better Delivery

9. Governance

Recommendation 9.1

All state and territory governments should deliver long-term infrastructure plans

These plans should take a 15-year-plus view, be updated regularly and integrated with long-term land-use planning processes. By taking a long-term view of infrastructure, governments can better plan for projected changes in demand, identify emerging challenges and establish a pipeline of well-conceived infrastructure reforms and investments.

The Australian Government supports this recommendation, noting this is a matter for state and territory governments.

Integrated, long-term planning is critical to ensuring that government investment in infrastructure provides the maximum benefits. Plans should identify both new investments and reforms which allow for more efficient use of existing infrastructure. The plans should also be cognisant of current and future infrastructure needs; ensure that economic corridors and precincts are appropriately protected from incompatible uses, while being appropriately maximised; and that consideration is given to cross border issues. The Australian Government supports linking the reforms to a pipeline of potential infrastructure projects. Where Australian Government funding is sought for projects, the projects must address a solution to a deficiency in the state plan and be subject to the Government's assessment framework.

While the Government anticipates that state infrastructure bodies will progress this recommendation at jurisdictional level, the Australian Government will further pursue this recommendation including through the negotiation of City Deals and the consideration of incentives and/or conditions to ensure that cities are well-planned and that Australian Government funding is appropriately allocated. Long-term infrastructure planning will also be a continuing focus of the Government's regional development agenda.

Recommendation 9.2

Infrastructure service standards (both minimum and desired standards) should be used by all governments to guide future planning and project development.

The standards will need to be reviewed periodically, to reflect potential changes in the wider environment, changes in expectations, and changes in economic and financial circumstances.

The Australian Government supports this recommendation.

The *Australian Transport Assessment and Planning Guidelines*, which are currently being updated, provide a comprehensive framework for overall transport system management, focusing primarily on planning, assessing and developing transport systems and related initiatives.



To support the Guidelines, state and territory governments are working to establish harmonised road asset data standards through Austroads, which will deliver a recommended harmonised road data standard for core road asset management activities and a business case demonstrating the value of adopting the new standard.

In addition, under the banner of national heavy vehicle road reform, the Australian, state and territory governments have brought together asset information and conducted assessments of heavy vehicle levels of service along the Key Freight Routes. The Key Freight Routes contain a number of different road types (or categories) which reflect user perceptions regarding levels of service based on extensive consultation with industry.

Recommendation 9.3

Alongside the delivery of integrated long-term infrastructure plans, state and territory governments should initiate an ongoing process of community engagement to discuss present and future infrastructure challenges and potential solutions.

Engaging the community at the strategic stage of infrastructure planning engenders a greater understanding within the community of future challenges and reduces the likelihood of opposition resulting from a lack of genuine consultation.

The Australian Government supports this recommendation, noting this is a matter for state and territory governments.

The Australian Government supports in-principle ongoing community engagement to discuss infrastructure challenges and potential solutions, including employment and business opportunities for local communities, especially in remote areas. For example, consultative arrangements implemented by federally-leased airports include a wide scope of activities and mechanisms ranging from formal forums such as the Community Aviation Consultation Groups (CACG) to social media. The CACGs promote community engagement and enhance transparency about on-airport development proposals, giving the community and other stakeholders the opportunity to understand and be consulted about airport developments.

In finalising the Environmental Impact Statement for the Western Sydney Airport project, the Government announced that it will establish a consultative group, the Forum of Western Sydney Airport, to provide the basis for ongoing community consultation, in particular in relation to the future flight path design process.

Recommendation 9.4

The Australian Government, in partnership with state and territory governments, should establish effective corridor protection mechanisms to ensure the timely preservation of surface, subterranean and air corridors, and strategic sites, for future infrastructure priorities.

The mechanism should include:

- Long-term strategic planning and project development work to identify corridors and lands;
- A stable and independent governance framework; and
- Shared financial responsibility between the Australian Government and its state and territory counterparts.

The Australian Government supports this recommendation, noting this is also a matter for state and territory governments.

The Australian Government recognises the importance of ensuring that the future infrastructure needs of the country are well-planned for and that economic infrastructure is protected appropriately from incompatible uses. This is critical to driving productivity and reducing future costs. To support this work in November 2015, the COAG Transport and Infrastructure Council agreed to develop a work program to protect transport corridors and precincts. The majority of projects will be completed during 2017.

Recommendation 9.5

Prior to deciding to fund an infrastructure investment, governments should undertake project development studies.

This work will materially increase the quality of decision making through enabling the proponent to understand the problem that needs to be addressed; developing a range of options to address it; identifying the solution that will deliver the greatest benefit; and determining the best approach to deliver the project.

The Australian Government supports this recommendation in-principle, recognising that project development and planning work prior to investment decision-making allows projects to be selected on a more informed basis, and will result in the selection of better projects.

In response to this recommendation, the Australian Government announced in the 2016-17 Budget \$50 million to help accelerate planning and development works on major transformational projects with the state and territory governments. This has included providing \$10 million to the Cross River Rail project in Queensland to identify amongst other things land use and zoning changes to promote better amenity, business and residential activity.

It will be expected that Infrastructure Australia will work closely with jurisdictions to assist in the development of business cases prior to any consideration of funding by the Australian Government. It will be expected that the Government's Assessment Framework will be applied, including the application of the *Principles for Innovative Financing* for the delivery of critical transport infrastructure.

It is noted, however, that where the Government is providing finance to the private sector to assist in the construction of infrastructure, project development studies by government may be an unnecessary burden as a private investor has the incentive to ensure that the asset will meet a market demand.

Recommendation 9.6

The Australian Government, and state and territory governments should allocate increased funding for project development work for initiatives identified on the *Infrastructure Priority List*.

These initiatives are priorities that have been identified by Infrastructure Australia as addressing a strategic infrastructure need, that nevertheless require further development and rigorous analysis to determine the most appropriate option to address that need.

The Australian Government supports this recommendation.

As mentioned in the response to recommendation 9.5, the Australian Government is providing \$50 million to help accelerate planning and development works on major transformational projects to bring forward business cases listed on the *Infrastructure Priority List*.

Recommendation 9.7

Infrastructure Australia will develop National Governance Principles in partnership with governments and the private sector to support better project decision making across the public infrastructure sector.

Key components of the National Governance Principles are likely to include:

- Development of long-term, integrated infrastructure plans;
- Publication of full project business cases, including supporting data and analysis;
- Completion of in-depth community engagement; and
- Commitment to the preparation and publication of robust post-completion reviews once a project has been delivered and throughout the lifecycle.
- Once they are established, the Australian Government should make the provision of infrastructure project funding to state, territory and local governments contingent on compliance with the National Governance Principles.

The Australian Government supports this recommendation in-principle, noting improvements in this area are likely to be achieved through existing guidelines, recently updated and agreed by all Australian governments.

The Australian Government supports undertaking community engagement in infrastructure planning and transparency in decision-making, noting it is generally the responsibility of state and territory governments.

As outlined in the *Smart Cities Plan*, the Australian Government will work with jurisdictions to encourage projects that meet broad economic and city objectives, such as accessibility, jobs, affordable housing and healthy environments.

The state and territory governments have also agreed to post-completion reviews under the current National Partnership Agreement on Land Transport.



Improvements in these areas can be achieved through the recently updated guidelines, including the *Australian Transport Assessment and Planning Guidelines*, and in consideration of the development of the next National Partnership Agreement. These considerations would be appropriately undertaken under the auspices of the COAG Transport and Infrastructure Council and the Infrastructure Working Group; with Infrastructure Australia's input sought as part of this process. In particular, care needs to be taken to ensure that updates to existing guidelines streamline processes and do not create duplication or additional red tape.

10. Best Practice

Recommendation 10.1

A national Infrastructure Performance Measurement Framework should be developed to provide routine measurement of the performance and efficiency of Australia's infrastructure projects, networks and systems.

The Australian Government should make infrastructure funding conditional on state, territory and local governments agreeing to provide appropriate data to support benchmarking.

Performance measurement should be:

- Conducted at the project, network and system level;
- Routinely published;
- Sensitive to genuinely commercially confidential information; and
- Undertaken annually.

The Australian Government supports this recommendation in-principle, noting the need to ensure that the framework is applicable across all infrastructure sectors.

The COAG Transport and Infrastructure Council agreed to measure the performance and efficiency of the procurement process, project construction costs and heavy vehicle performance in the land transport sector as part of its response to the recommendations in the Productivity Commission's *Inquiry into Public Infrastructure* (2014). The *Infrastructure Benchmarking Report*, published in 2015 provides the findings of the first benchmarking process and outlines plans for continued and improved future monitoring of infrastructure procurement performance and construction costs. The Council has committed to ongoing benchmarking in this sector with the next report due in 2017; and to extending benchmarking to the water sector.

Recommendation 10.2

The Australian Government should make funding for nationally significant projects contingent upon proponents agreeing to post-completion reviews.

Post-completion reviews should be undertaken periodically throughout the operational life of the asset and should measure performance and benefits against forecasts. To ensure robust results, all post-completion reviews should use an independent template, be independently-audited, published in full, and findings incorporated into the planning processes for new infrastructure.

The Australian Government supports this recommendation, noting that periodic reviews through the operational life of an asset should be the responsibility of the asset owner.

The Australian Government supports post-completion reviews of projects. Proponents of Australian Government funded projects are required to complete a post-completion report. Provisions for extensive post-completion reviews exist in the *Notes on Administration for Land Transport Infrastructure Projects* under the *National Partnership Agreement on Land Transport Infrastructure Projects*. The *Australian Transport Assessment and Planning Guidelines* provide guidance on best practice for practitioners for the assessment of post-completion evaluations to ensure effectiveness of strategies, policies, plans and individual initiatives achieve desired outcomes and performance targets.

The Bureau of Infrastructure, Transport and Regional Economics has conducted a number of post-completion evaluations of major projects funded in-part by the Australian Government.

Recommendation 10.3

The COAG Infrastructure Working Group should deliver a national infrastructure skills plan to ensure Australia has the right people with the right skills to deliver our infrastructure to 2031 and beyond.

- A skills plan should provide: Information on the likely professional and workforce requirements to deliver planned and forecast infrastructure supply over the next 15 years and beyond;
- Advice on critical specialist infrastructure skills deficiencies that could delay construction, or add to the costs of projects and maintenance; and
- Information on the impacts of new technology, opportunities to improve coordination across projects and sectors and how employers can work more effectively in partnership with training providers.

The Australian Government supports this recommendation in-principle, noting that the Infrastructure Working Group undertook a skills audit for the public sector in 2013.

The COAG Infrastructure Working Group undertook an extensive assessment of skills and capabilities in 2013, which led to the Commonwealth working with jurisdictions to provide opportunities for leaders to attend the Executive Leadership of Major Projects course at the John Grills Centre, University of New South Wales.



The Australian Government considers that industry peak bodies have a critical role in this area and should be encouraged to develop specialist educational plans relevant to their sectors. The Australian Government has asked Infrastructure Partnerships Australia to work with industry to develop a plan which provides advice for industry on the likely professional workforce requirements and the skills deficiencies expected as the sectors adapt to changes in technology and project delivery.

The Australian Government is working to identify strategies for tapping currently under-utilised capacity within the population, for example, the Indigenous population in northern Australia. In implementing the White Paper on Developing Northern Australia, the Government is working with jurisdictions to achieve Indigenous employment and/or supplier use in road and other relevant projects in the north, which will reflect the working age Indigenous population in the part of the jurisdiction that falls within northern Australia.

Recommendation 10.4

Governments should make the use of Building Information Modelling (BIM) mandatory for the design of large-scale complex infrastructure projects.

In support of a mandatory rollout, the Australian Government should commission the Australasian Procurement and Construction Council, working with industry, to develop:

- Appropriate guidance around the adoption and use of BIM; and
- Common standards and protocols to be applied when using BIM.

The Australian Government supports the use of digital information management on a project by project basis.

The Australia Government considers the use of Building Information Modelling and Digital Engineering is critical to ensuring cost effectiveness for innovative design and delivery. However, it is best considered on a project-by-project basis, with due consideration of the additional costs associated with this approach and the impacts on local tenders. For this reason, the Government does not support its mandating.

On 4 November 2016, the COAG Transport and Infrastructure Council agreed to *National Digital Engineering Policy Principles* which provide a framework to promote the uptake of digital engineering across jurisdictions. This work has already been undertaken internationally (particularly in the United Kingdom), and further harmonisation in Australia will bring Australia up to world's best practice.

Recommendation 10.5

Federal, state and territory governments should adopt international standards by default unless there is a compelling rationale for the development of a nonconforming Australian and jurisdictional standard.

Where a rationale to create a locally-specific standard or approach does exist, consideration should be given to appropriate modification of a recognised national or international benchmark.

The Australian Government **supports this recommendation**, noting that in some cases Australian standards may be higher than international standards, especially with regards to workplace, health and safety requirements.

As part of the Government's Industry, Innovation and Competitiveness Agenda, the Australian Government agreed that it will adopt the principle that if a system, service or product has been approved under a trusted international standard or risk assessment, Australian regulators should not impose any additional requirements unless it can be demonstrated that there is good reason to do so. All Australian Government regulatory standards and risk assessment processes will be reviewed against this principle.

Further, in October 2014, the Council of Australian Governments agreed to explore adopting, as a general principle, trusted international standards or risk assessment processes for systems, services and products, unless it can be demonstrated that there is good reason not to do so.

Recommendation 10.6

Australia needs strong and dependable commitments to proceed with planned projects and reforms to establish confidence in infrastructure markets.

Substantial upfront costs and long construction times mean infrastructure can have a unique risk profile for investors. Investors and constructors rely upon governments to provide a positive agenda for growth and development. To further expand and deepen the market, the Australian Government should work with the New Zealand Government and industry partners to develop the Trans-Tasman procurement market, as proposed in the Thirty Year New Zealand Infrastructure Plan 2015.

The Australian Government **supports this recommendation in-principle**, noting this requires consultation and agreement with the New Zealand Government.

On 28 October 2016, the Australian Government, in cooperation with Infrastructure Partnerships Australia, launched the Australian and New Zealand Infrastructure Pipeline (ANZIP). ANZIP provides detailed information on upcoming and medium-term greenfield and brownfield infrastructure investment opportunities. It complements the Government's National Infrastructure Construction Schedule. The establishment of ANZIP is part of Australia and New Zealand's longer term reforms toward development of a more seamless market.



Recommendation 10.7

Project proponents should routinely develop strategies to ensure the full benefits of infrastructure investments are realised.

Benefits associated with given projects should be actively managed to maximise return on investment and monitored through post-completion review processes. This approach could be equally beneficial when applied to under-utilised existing assets and network.

The Australian Government supports this recommendation.

As indicated under recommendation 10.2, the Australian Government supports post-completion reviews of projects to maximise the value of governments' investments in infrastructure, and proponents of Australian Government funded projects are required to complete a post-completion report.

The Government will continue to work cooperatively with project proponents, predominantly state, territory and local governments, to ensure the benefits of governments' investments are realised, including employment and business development benefits. This includes through collaboration on post-completion project reviews and benchmarking of project costs and procurement, to drive value for money in project delivery, including reducing costs where appropriate.

The Government recognises that private owners of infrastructure would be required to develop and monitor these requirements as part of their obligations to their shareholders.