

# The Infrastructure Challenge

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## INTRODUCTION

Infrastructure investment is a key driver in strengthening the national economy and enhancing Australia's productivity and liveability. The International Monetary Fund estimates that every dollar invested in infrastructure boosts economic activity by up to \$1.80.

While we have been making significant progress with Australia's infrastructure in recent years, we continue to need substantial new investment in infrastructure from both the Government and the private sector in the coming decade. Improving the productivity of our supply chains and transport systems will come from new investment in our roads, rail and ports, and, just as importantly, reforms to our national planning, regulations and governance of our infrastructure sector. That is, ongoing and broad-based reform is needed to ensure we avoid repeating the bottlenecks and capacity constraints of the past.

The Australian Government believes that the right approach to nation building and a seamless national economy is three-pronged: improved planning and governance, sound investment and a determined approach to microeconomic reform.

## KEY DRIVERS FOR REFORM

### Productivity Growth

An important objective underpinning all of the work of the Department of Infrastructure, Transport, Regional Development and Local Government (the Department) is, unsurprisingly, building productivity growth. In the last decade, Australia's multifactor productivity growth slowed to 0.7 per cent a year, below our long term average of 1.1 per cent and well below the 1990s peak of 2.3 per cent a year.

This fall has been driven by many factors including, in recent years, extended drought and the global economic downturn. However, it is clear that ongoing policy and regulatory reforms and sensible investment decisions will play a significant part in lifting our future productivity growth.

The need for improved performance to support productivity growth is strengthened by recent higher than expected population forecasts from the

Mr Mike Mrdak, Secretary, Department of Infrastructure, Transport, Regional Development & Local Government.

Australian Bureau of Statistics, as well as continued signs of economic recovery.

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### The GFC Downturn and Effect on Investment

The onset of the global financial and economic crisis created considerable challenges for infrastructure investment, with Australian investors and banks facing markedly increased costs and difficulties to secure debt and equity. The capacity and willingness of the private sector to invest in large economic infrastructure projects has been severely reduced, particularly for projects with significant demand risk.

The Australian economy has been one of the most resilient in the world during the worst of the global financial crisis. Australia has every right to look confidently into the future. However, we face a significant infrastructure task to remain globally competitive. Research conducted by Citigroup in June 2008 – just prior to the global financial crisis – estimated the national infrastructure investment task for the decade to 2018 at over \$770 billion. Over \$360 billion of this investment would be required from the private sector. A report released by Infrastructure Partnerships Australia in July 2007 listed 160 critical projects and key policy reforms, externally valued at over \$700 billion.

With such an unprecedented scale of investment required in infrastructure, during a time when the global financial market remains uncertain, Australia faces considerable challenges to make sure investment continues in nationally significant economic infrastructure.

### Congestion

A further key challenge Australia will need to manage effectively in the coming years is congestion. Congested roads, overcrowded public transport and the inability to ensure that key transport corridors and assets are free

from bottlenecks and protected for future growth are growing costs for our economy and community. The avoidable social cost of urban traffic congestion was estimated at about \$9.4 billion in 2005, and is expected to more than double by 2020.

Even when it is assumed that state road authorities can coax an extra 1 to 2 per cent per year extra capacity from networks, the Bureau for Infrastructure, Transport and Regional Economics (BITRE) estimates that the expected growth in congestion costs will be some three times that of the previous 10 years. BITRE projects total road vehicle use to grow by around 40 per cent and road freight to grow by 60 per cent between 2009 and 2025.

Our passenger movements at Australian airports are expected to increase by 4 per cent per annum to 227 million in 2025. And the ports are about to get busier: BITRE forecasts containerised exports will grow from around 1.5 million twenty-foot equivalent units now to 6.3 million units over the next 20 years. Containerised imports will also grow strongly, more than doubling over the same period.

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### Population Growth

With the most recent *Intergenerational Report* predicting Australia's population to exceed 35 million by 2050, and the *State of Australian Cities 2010* report estimating that 72 per cent of this increase will be in capital cities, Australia faces significant challenges to ensure the competitiveness of Australian infrastructure in the future.

A further challenge is presented by the makeup of our growing population: the percentage of our population aged 65 and over will nearly double from 14 per cent to 23 per cent between 2009 and 2050, amounting to over 8 million people.

These are important figures that signal critical trends. Rapid growth in our major cities has required the Australian Government to re-think its approach to cities and transport infrastructure, emphasizing the need for better long-term planning and investment.

### THE REFORM AGENDA

It is in the context of these challenges that the Infrastructure portfolio is shaping its policy agenda and making significant changes to the governance of, and investment in, Australia's infrastructure.

## Governance

When the new Australian Government assumed office in 2007, the Honourable Anthony Albanese MP was appointed Australia's first Federal Infrastructure Minister. This represents a fundamental shift in the breadth and focus of the portfolio's investment reform agenda.

The Government rapidly established Infrastructure Australia within the portfolio to bring together, for the first time, all levels of government and the private sector to lead the planning and project identification of major infrastructure such as road, railways, ports, water and electricity utilities and broadband. Chaired by Sir Rod Eddington, the Infrastructure Australia Council comprises a mix of senior private sector investment expertise and representation from jurisdictions to ensure that there is strong, independent advice to Governments and industry on infrastructure reform and investment.

In 2008, Infrastructure Australia undertook an audit of the nation's infrastructure for the Council of Australian Governments (COAG), delivering a priority list of projects which meet national priorities and a 'pipeline' of projects for further development. This process involved a rigorous and thorough review of the benefit-cost project assessments to ensure that the highest economic and social benefits are being achieved through public investment.

In its first year, Infrastructure Australia also reviewed the extent to which infrastructure investment can be facilitated through better planning and approval processes as well as public/private partnerships. These reforms have been adopted by COAG.

In 2008, the Government established the Building Australia Fund to fund nationally significant projects identified on Infrastructure Australia's priority list. In determining 2009-10 Budget outcomes, the Government considered Infrastructure Australia's priority list and committed approximately \$7.6 billion from the Building Australia Fund toward 11 strategic projects in Australia's metro rail networks, national road priorities and port infrastructure.

Infrastructure Australia (IA) has also provided national leadership by setting out seven themes which it considers should provide the objectives for government infrastructure investment and reform:

- Transforming our cities – increasing public transport capacity in our cities and making better use of existing transport infrastructure
- Adaptable and secure water supplies
- The creation of a true national energy market

- Competitive international gateways
- A national freight network
- A national broadband network; and
- Providing essential indigenous infrastructure.

These national objectives, along with the IA Prioritisation Methodology, ensure that major projects are assessed against their capability to expand Australia's productive capacity, build our global competitiveness, develop our cities and regions, reduce greenhouse gases and improve the liveability and quality of life of our communities.

## INVESTMENT

Under the Nation Building Program, the Department is administering \$37 billion for land transport infrastructure investment over six years through to 2013-14. The Government is investing this \$37 billion in capacity building infrastructure such as road, rail and ports. This includes \$22 billion for rural and regional transport infrastructure. The program is funding critical national investments, including completion of the duplication of the Hume Highway, duplication of key sections of the Pacific Highway, major safety improvements on the Bruce Highway and major rail investments in our national rail freight and urban passenger network.

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The most recent Commonwealth Budget continues this significant investment in Australia's infrastructure, with funds targeted to boost rail productivity, improve safety, and overhaul transport regulations as we move towards a seamless national economy.

For example, in 2010-11, a further \$1.2 billion has been committed to the Australian Rail Track Corporation (ARTC) to continue to modernise the interstate rail freight network and thus expand Australia's capacity to make the most of the economic opportunities ahead. Such investment – essential to lifting our national rail freight network into the 21st century – includes seven new projects across four states and the creation of more than 1 500 jobs, primarily in regional Australia.

This investment seeks to provide Australia with a modern, safe and sophisticated transport network that can meet our future challenges with confidence.

To deliver this large and complex program with the states and territories, the portfolio is implementing different



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approaches to the way in which the Commonwealth operates as a project funding partner and project manager. The Department has reformed its oversight practices and has taken steps to adopt a much stronger focus on project management. This approach will allow the Commonwealth to more closely oversee key projects and ensure that:

- projects are delivered effectively and within budget
- the Government's broader objectives in funding particular projects are being met; and
- more timely and accurate project information is readily available for the Government.

This heightened focus on project management is also being extended across all significant projects managed by the Department in the areas of transport infrastructure and broader community infrastructure. The intention is that the Department will come to be considered as a centre of excellence in project management across the broader Commonwealth public service.

### REGULATORY REFORMS

#### Transforming Private Financing and Improving Competition in the Market

Even with these current investment commitments, however, the financing of transport infrastructure is still a major challenge that we will have to face in the coming years.

The Australian Government stepped in quickly as the scale of the global economic crisis became apparent. The Government's response was crucial as private sector finance dried up. The challenge now is getting the settings right for encouraging greater private sector involvement in major transport infrastructure investment as part of the transition out of the global financial crisis.

This needs to happen against a backdrop where infrastructure is becoming more expensive. For instance, between 1994 and 2009 the prices for road construction increased by 65 per cent in real terms. Even allowing for the introduction of the GST in 2000, this is still a substantial increase. Moreover, investment in our next generation of major projects will require large capital investments which, in dollar terms, will dwarf our previous investments.

We will need to be creative in examining financing options. There is a range of financing vehicles potentially at governments' disposal. Getting the right fit will be important, as will determining the appropriate share of project risk. Governments need to do their part: defining long term priorities and giving the private sector greater confidence and predictability to plan with us.

To this end, on 29 November 2008, COAG formally endorsed the first National Public Private Partnerships (PPP) Policy and Guidelines developed by Infrastructure Australia in conjunction with the COAG Infrastructure Working Group. These guidelines set out the elements of the best practice approach to the development of PPPs and aim to encourage greater participation by the private sector in delivering key infrastructure projects.

Infrastructure Australia also recently reviewed the barriers to competition and efficiency in the procurement of PPPs. The review responded to criticism that bid costs in Australia are excessive, that it takes too long to award contracts and that new local and overseas entrants face barriers to entering the Australian PPP market. The review found that the biggest barrier to new entrants to the PPP market is the relatively small number of PPP projects in Australia in comparison with Canada and the UK. This situation can deter new entrants from establishing the capability to go head to head with the existing highly competitive field of bidders.

The review also found that bid costs for contracts are significant – often running into tens of millions of dollars. Bid costs in Australia are, on average, around 25 to 45 per cent higher than in Canada for similarly sized projects, but significantly lower than in the United Kingdom – the two most comparable countries. The

review also found that the time to procure a PPP contract in Australia is 17 months on average, compared with 16 months in Canada and 34 months in the UK.

The Australian, State and Territory Governments are now developing a plan of action to respond to the findings and recommendations in the report. This plan will soon be publicly released by the COAG Infrastructure Working Group.

Reform of the processes for taking projects into the market is also critical. To this end, jurisdictions are now implementing a national prequalification system reform which was announced by Minister Albanese in June 2010. Prequalification is a risk management tool that states and territories use extensively for the delivery of infrastructure projects. This process aims to identify contractors who have the necessary technical and financial capabilities, as well as the management systems required, to give the state or territory a level of confidence that the contractors can be relied upon to build projects to the expectations of taxpayers.

While prequalification is a good thing, the way it currently operates creates problems. Each state and territory operates its own prequalification system. A contractor wishing to operate around the country therefore needs to deal with eight different systems, each one designed to do the same thing, but doing so in a different fashion. This means that contractors wanting to compete in more than one jurisdiction have to deal with unnecessary duplication and red tape. This acts as an entry barrier, reducing competition. It also means jurisdictions and contractors are incurring unnecessary costs.

The reforms centre on the introduction of a new National Prequalification System to operate from 1 January 2011. The system will initially apply to road, bridge and non-residential construction projects valued at \$50 million or higher. A key feature is the new system will be harmonised – all states and territories will apply the same tests and benchmarks to determine whether an applicant prequalifies. Another key feature is mutual recognition. A contractor prequalified in one state or territory will have that prequalification recognised in other states and territories. This will result in improved competition and save costs for contractors and governments while retaining the risk management benefits of prequalification.

## Single National Regulators

The Government has also initiated a number of reforms to reduce the regulatory burden on business in the infrastructure and transport industries. Achieving best practice in efficient national markets has brought into focus the need for uniform safety and broader regulatory frameworks.

COAG has agreed that by 2013 Australia will implement a single national safety regulator for our rail, heavy vehicle and maritime industries.

Despite numerous attempts since Federation, we still retain a fragmented transport safety regulatory regime. For example, the diversity of rail development in Australia is well-known and most obvious in our break of rail track gauge problems with different narrow, broad and standard gauge systems. We have more than 44 000 kilometres of track with many different operational standards and practices. The rail industry currently has seven separate regulatory authorities and uses 22 separate communication systems across the country. An operator must be licensed and accredited in each jurisdiction. There are 46 pieces of state and commonwealth legislation applying to rail operators including seven rail safety Acts, nine Occupational Health and Safety Acts and seven dangerous goods Acts.

Australia's heavy vehicle operators have nine separate regulatory regimes to deal with which means differences in the adoption, interpretation and enforcement of multiple pieces of heavy vehicle law. Despite 20 years of reform and harmonisation of regulations between jurisdictions there remain differences in annual registration requirements, fatigue driving hours, axle weights, load restraints and vehicle widths.

These single national regulator reforms will generate a range of benefits for businesses consistent with COAG's agreed outcomes for the Seamless National Economy, including:

- an efficient national market through the seamless transfer of labour and goods between jurisdictions
- a single set of regulatory requirements operating nationally, including nationally consistent enforcement regimes
- reduced costs for businesses and workers operating across State and Territory borders; and
- improved safety and decreased risk to the public.

The national rail and heavy vehicles regulators will be based in separate host jurisdictions, South Australia and Queensland respectively. The maritime safety regulator will be achieved by expanding the role of Australian Maritime Safety Authority (AMSA).

In addition, a single national investigator for rail incidents is being created, and will be achieved by expanding the role of the Australian Transport Safety Bureau.

## COAG Road Reform Plan

The Australian Government is also currently working closely with state and territory governments in

progressing COAG's Road Reform Plan. This work is a long-term road reform agenda to promote timely and efficiency investment in, and use of, land transport infrastructure to enable Australia to meet the growing freight task and maximise economic growth. The key focus of this work is to consider alternative models of heavy vehicle road charging and funding, with this work flowing from COAG's response to the Productivity Commission inquiry into freight infrastructure pricing.

The current practical focus of this work is to deliver to COAG by the end of 2011 a Feasibility Study of alternative approaches to heavy vehicle charging and funding. This will involve a detailed examination of the advantages and disadvantages of alternative heavy vehicle direct charging options, for example charging based on mass, distance and/or location, and the associated reforms that will be needed to implement a preferred charging option. As an interim reporting milestone, Transport Ministers will deliver to COAG by the end of 2010 an initial assessment of high level options. Officials have also established an industry advisory group to provide for ongoing engagement in this work.

### National Planning Reforms – Better Planning Our Cities and Key Transport Corridors

Perhaps the most important aspect of infrastructure planning and investment is how to address the challenges posed by the growth of our cities. Australian cities have contributed nearly 80 per cent of national GDP, 75 per cent of employment, 84 per cent of economic growth and 81 per cent of employment growth for most of the last decade. In 2008, over 60 per cent of Australians lived in cities with over one million residents.

In 2008, the Australian Government established a Major Cities Unit as part of Infrastructure Australia. The unit's first major output is the *State of Australian Cities 2010* report, which measures the population, productivity, living standards, social inclusion and sustainability of Australian cities.

Measures have also been undertaken through COAG to ensure our cities are able to meet the challenges of the future. In December 2009, COAG agreed that by 1 January 2012, all jurisdictions will have plans in place that meet new national criteria for capital city strategic planning systems. The national criteria will result in increased public confidence in planning systems and better outcomes from government investment in infrastructure.

The national criteria will ensure that capital city strategic planning systems address nationally significant policy issues, including climate change, productivity, social inclusion, health, housing, population growth and

demographic changes. The criteria will provide for nationally significant economic infrastructure – both new and upgrades of existing infrastructure. They will also be integrated across functions and coordinated between all levels of Government, provide for future-oriented and publicly available long-term strategic plans, and clearly identify priorities for future investment and policy efforts by Federal and State Governments.

In addition to the transport reforms discussed above, the Prime Minister has requested the National Transport Commission and Infrastructure Australia to develop a National Ports Strategy for consideration by COAG in 2010. The National Ports Strategy will be a key element of an overarching National Freight Strategy and a National Freight Network Plan also being developed by the National Transport Commission and Infrastructure Australia for consideration by COAG in 2010.

The development of national freight and ports strategies are intended to provide for a coordinated long term blueprint to guide policy and investment decisions into the future while maximising the efficient movement of freight to and from ports and around Australia.

## CONCLUSION

Through the Australian Government's nation building initiatives, including the Nation Building Program and the Nation Building Plan for the Future, the portfolio is helping to enhance Australia's long-term productivity and competitiveness through the funding of significant infrastructure projects and a comprehensive regulatory reform agenda.

Working closely with its government and industry partners, the Australian Government is strongly engaged in a wide infrastructure reform agenda that encompass infrastructure planning, transport regulatory reform and ongoing microeconomic reform. Such a comprehensive approach is the best way for Australia to lift its productivity growth, in the interests of all Australians.

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