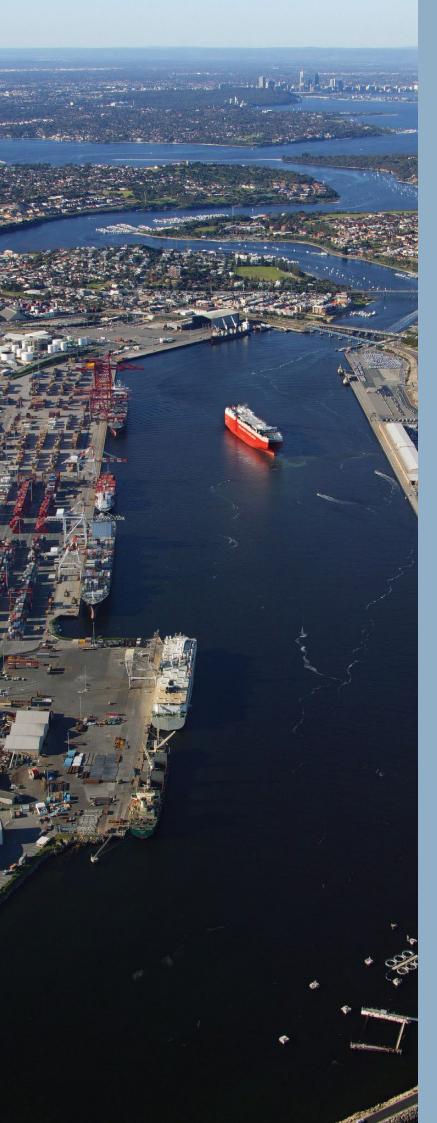
AUSTRALIAN INFRASTRUCTURE PROGRESS AND ACTION A REPORT TO THE COUNCIL OF AUSTRALIAN GOVERNMENTS



Australian Government Infrastructure Australia



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Cover photo: Supporting investment in infrastructure for remote Indigenous communities remains a central concern for Infrastructure Australia. Solar power facilities such as this installation at Hermannsburg in the Northern Territory offer more reliable, lower cost power to hundreds of people living in and around this town. The solar project also exemplifies the need to shift to less carbon-intensive forms of energy generation—a broader challenge facing the country as a whole.

Inside cover photo: Successive governments in Western Australia have taken various steps, including use of a dedicated funding regime to meet the cost of buying land, to ensure that corridors for transport connections to the Port of Fremantle have been protected.

Back cover photo: The rail line passing through Kalgoorlie is on the indicative national land freight network.

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Letter from the Chairman

Hon Anthony Albanese, MP Minister for Infrastructure and Transport

I have pleasure in presenting Infrastructure Australia's fourth annual report to the Council of Australian Governments.

Last year's report highlighted the importance of using reform in the infrastructure sector to support national efforts to raise productivity in the Australian economy. Improvements in infrastructure planning and the need for a wider debate about our willingness to pay for our infrastructure were highlighted as areas requiring the attention of governments, industry and the broader community.

The report's main messages were well received by many commentators. The central argument concerning the 'disconnect' between expectations for our infrastructure networks and the capacity of our institutions to prosecute difficult reform resonated with many readers.

Those issues continue as central concerns for Infrastructure Australia. Work by others in the past year, notably the report on capital city strategic planning systems by the Council of Australian Governments' Reform Council, has added to the weight of evidence that much more can be done by governments.

Against that background, Infrastructure Australia is pleased to report that progress is being made towards securing a more efficient regulatory environment.

Work to establish single national regulators for the rail, heavy vehicle and maritime sectors is well advanced. The agreement of the Council of Australian Governments in April to integrate environmental assessment processes for major projects is also welcome. Infrastructure Australia has previously reported on the need for change in those areas.

Experience suggests, though, that governments will need to keep a close eye on these reforms to ensure that agreements in principle are translated into real change.

Commencing a trial of allowing B-triple trucks to use the Hume Highway would be an important demonstration of an ongoing commitment to raising productivity in the transport sector.

In the area of regulatory and policy reform, Infrastructure Australia's work continues to be complemented by that of the Productivity Commission. The Commission's work on urban water is a further example of its focus on providing evidence-based, balanced advice.

The two organisations share a mutual aim of assisting the country to raise productivity. Infrastructure Australia looks forward to continuing our close relationship.

The nation is struggling to find a way of dealing comprehensively with two potentially competing concerns: cost of living pressures, and the need to apply more cost-reflective pricing to our infrastructure networks, especially in the transport sector.

Resolving this conundrum is vitally important. Infrastructure Australia is urging governments, oppositions and the community at large to work constructively to find an answer to this puzzle.

Australia is not alone in this; other countries face the same challenge.

Our proud, century-long tradition of innovation and progressive public policy – universal suffrage, aged pensions, unemployment benefits and, more recently, superannuation and taxation reform – shows that we can adapt and improve the prospects for Australians from all backgrounds.

In the early 21st century, we must maintain that tradition, and find a way of equitably funding the development and maintenance of our infrastructure.

The decision of the Australian and South Australian Governments to fund jointly the Goodwood and Torrens Junction projects in Adelaide is a significant milestone. Both projects are important in their own right. They will support balanced development in Adelaide for some time and dramatically improve the productivity of rail freight movements between Perth, Adelaide and Melbourne.

Also important is the fact that, in just three years, all of the ready to proceed projects in Infrastructure Australia's first infrastructure priority list have received funding from the Australian, state and territory governments.

This is an important testament to the regard for Infrastructure Australia's work across all governments. Infrastructure Australia is pleased that governments have chosen to fund the projects identified as ready to proceed priorities.

These outcomes provide tangible evidence of the value of collaboratively engaging with Infrastructure Australia's processes, even if at times our assessments do not align with the views of project proponents.

The leadership required to pursue some of the difficult reforms ultimately needs to come from the Council of Australian Governments itself, supported by relevant Ministerial councils and committees.

While acknowledging that the Council of Australian Governments has a significant and broad agenda, Infrastructure Australia believes infrastructure issues, and the contribution that infrastructure can make to improving national productivity, should continue to receive the Council of Australian Governments' active attention. Looking ahead, the country will benefit from governments maintaining a focus on getting our ports and public transport systems right. Ports and their connections are vital to the economic wealth of an island nation. Public transport is just as vital to the future of our cities, places where over eighty percent of all Australians reside.

The Infrastructure Australia Council would like to extend its sincere thanks to Heather Ridout for her contribution to Infrastructure Australia's work since its establishment in 2008. Following her appointment as a member of the board of the Reserve Bank, Heather resigned from Infrastructure Australia.

The Reserve Bank appointment acknowledges the skills of a fine contributor to Australian public policy. The Infrastructure Australia Council valued Heather's insights and the even-handed manner in which she presented her views. We wish Heather well in her new role.

Infrastructure Australia looks forward to working with others to advance the management and development of Australia's infrastructure networks.

Sir Rod Eddington AO Chairman, Infrastructure Australia



Executive summary

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Willoughby City Council in New South Wales has incorporated one of the largest urban stormwater re-use systems in Australia at 'The Concourse', a new performing arts centre developed by the Council at Chatswood. The 5,000m³ storage facility allows for harvesting, treating and re-use of stormwater. The scheme will result in significant potable water savings, not just for 'The Concourse' building, but for the Chatswood central business district as well. Treated stormwater will be sold to local businesses so that they can reduce their use of potable water. The scheme also provides a role in mitigating flooding in the area. Improving the contribution infrastructure makes to national wellbeing remains Infrastructure Australia's focus.

Infrastructure Australia was established to support a transformation in the way Australia invests in infrastructure. Our mandate is to encourage a long-term, strategic approach to infrastructure planning, investment and delivery.

Infrastructure is critical to national productivity, economic growth and overall wellbeing. Effective and efficient infrastructure is an enabler for growth and performance for all sectors in the economy.

Well-targeted investment in physical infrastructure can provide a range of economic, social and environmental benefits. From an economic perspective, benefits accrue from productivity improvements. For example, effective transport systems lead to reduced freight and business travel costs which can lead to increased trade and competition.

Further, efficient infrastructure plays a vital role in building social cohesion. High quality infrastructure allows communities that have a range of incomes, backgrounds and demographic characteristics the ability to access employment opportunities and health and education resources in a fair and equitable way. This is important as social cohesion is linked to economic development, investment attractiveness and business competitiveness.

Improving the way Australia both uses and procures its infrastructure will contribute to greater economic prosperity and an enhanced standard of living for all Australians. According to the Productivity Commission, improving productivity and efficiency to achieve best practice in transport and energy infrastructure and other activities could, after a period of adjustment, increase gross domestic product by nearly two per cent. Based on the current size of the Australian economy, such an increase amounts to around \$25 billion per year.¹

Our goal

Infrastructure Australia's goal is to work with governments, industry and the community to adopt a national, strategic approach to infrastructure investment which addresses longterm social and economic objectives.

Key challenges

Currently, infrastructure planning remains focussed on major projects rather than what infrastructure can do to improve Australians' lives. Plans for our cities and regions are rarely derived from a critical assessment of the nation's growth challenges and fiscal projections.

Debates about the respective shares different governments should contribute to projects highlight the funding constraints facing all governments. In this context, difficult decisions are being avoided. Governments are struggling to equip the community to debate matters such as charging for the use of infrastructure, impacts on the cost of living and the cost to future generations of not expanding our infrastructure networks.

Consistent pursuit of sensitive regulatory reform remains an elusive goal. Agreements to pursue reform take years to reach, and then the 'follow through' on implementation is slow and sometimes piecemeal.

Achievements

Even so, governments are beginning to respond to these challenges. The agreement to establish single regulators for the road, rail and maritime sectors is historically significant, and will yield billions of dollars in savings over coming decades. Governments have increased their investment in infrastructure. Proponents are recognising that investment in planning and project development and the desire to question 'obvious' conclusions can pay off in the form of better, more robust projects. The Cross River Rail project in Brisbane is an example. Infrastructure Australia has assessed the project as ready to proceed.

The way forward

To build on progress to date, the nation needs to concentrate on further improving performance in:

- A. strategic planning establishing credible longterm infrastructure plans, which focus on better use of existing infrastructure as well as new capital investment;
- B. funding and financing implementing initiatives to increase the pool of funds available to invest in new projects and use more efficient financing mechanisms, particularly in partnership with the private sector; and
- C. governance and reform making meaningful improvements to existing policy and regulatory arrangements to make infrastructure markets more responsive to community needs and market demands.

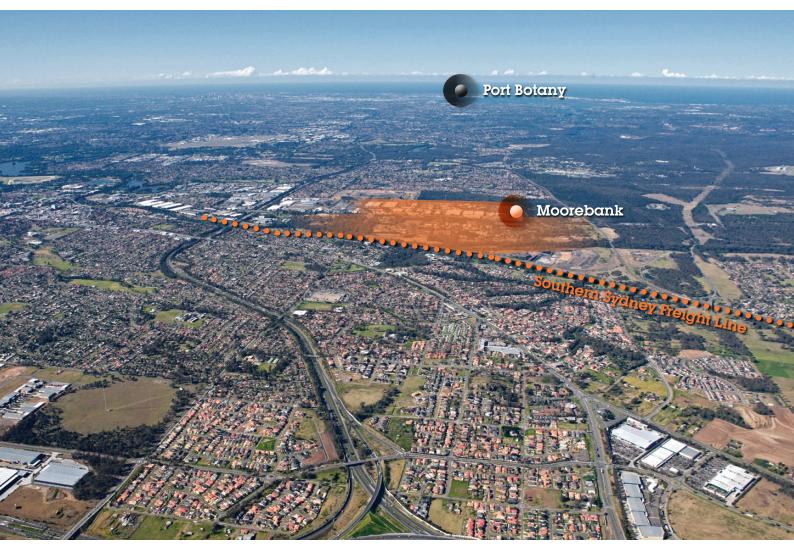
Strong leadership from decision makers and opinion makers is required to create the conditions for effective infrastructure investment and management. This leadership needs to support the community in taking a long-term view of the country's infrastructure needs, while reaching a mature view of how the country might meet those needs.

These matters go to the heart of our nation's future prosperity. Opportunistic behaviour and partisan opinion will sell the country short.

While governments will necessarily lead planning and policy, involving industry in the planning, financing and delivery of infrastructure improvements is to be encouraged. The private sector can bring insights, resources and capabilities not readily available to government. This can assist governments in meeting the substantial demand for improved infrastructure. The private sector needs and seeks a committed pipeline of infrastructure projects, and effective procurement processes, in order to optimise its participation in the delivery of projects.

Some decisions will be difficult and unpopular, for example in relation to the wider application of user charging. These decisions are likely to be unavoidable if we are to secure the infrastructure we desire. Increasing the community's awareness of the need for such decisions will facilitate a more informed debate about how our infrastructure networks can help support our aspirations for the nation. Infrastructure Australia will continue to work collaboratively with governments, business and the community to:

- increase public debate
 in an effort to address
 the 'disconnect'
 between Australia's
 infrastructure
 aspirations and
 the community's
 preparedness to fund
 those aspirations; and
- channel resources into projects of greatest public benefit.



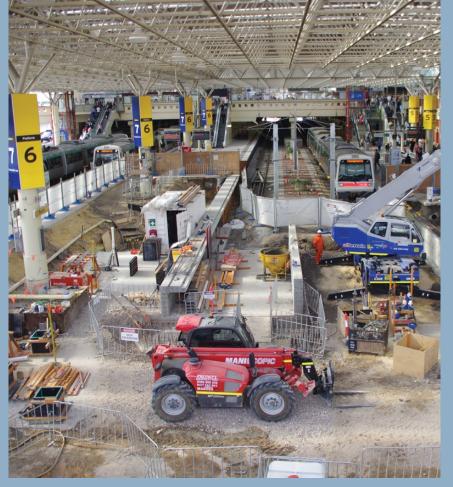
Development of an intermodal terminal at Moorebank in south western Sydney will transform the movement of freight in Australia's largest city and support the greater use of rail for moving freight around the country. This photograph captures the linkages in the logistics chain, including the junction of the M5 and M7 motorways in the foreground, the soon-to-be-completed Southern Sydney Freight Line in the mid distance adjoining the Moorebank terminal site and Port Botany on the horizon.

Infrastructure Australia's key priorities for the future

This report sets out a series of opportunities, challenges and ways forward to meet Australia's future infrastructure needs. Our focus is on acting on the opportunities which present the greatest potential benefits for the nation. These are summarised below.

Strategic planning

- Assist in preparing robust longterm strategies which consider how our decisions now will shape future cities and regions and which:
 - integrate land use strategies and fiscal strategies;
 - identify corridors and establish mechanisms for corridor protection;
 - develop public transport strategies;
 - engage with governments and others about road charging models, including network charging; and
 - reflect the importance of asset management and digital infrastructure in optimising the funds available for infrastructure investment.



Public transport

- Improve regional infrastructure planning and identify worthwhile projects that are eligible for funding through the *Regional Infrastructure Fund.*²
- Work with governments and the private sector to implement the actions identified in the *National Ports Strategy*³ and finalise the *National Land Freight Strategy Update.*⁴

Infrastructure Australia is focussed on providing robust, transparent evaluation of project proposals, using publicly-available criteria, to assist governments in deepening the national infrastructure pipeline.



Port Botany



Reform of road freight

Funding and financing

- Work with governments and industry to implement agreed recommendations arising from the work of the Infrastructure Finance Working Group.
- Encourage initiatives by state and territory governments to review their government-owned assets to identify their potential for sale or lease to the private sector.

Reform

- Encourage sustained reform of infrastructure markets to attract private sector financing of infrastructure through reforms to government procurement and more competition in the construction and financing sectors.
- Work with relevant stakeholders in an effort to resolve freight productivity impediments through pilot projects and to actively participate in efforts to reform road governance in respect of Australia's national land freight network.

- Further the case for reform of water management in our major cities and regional towns.
- Continue to monitor the progress and impact of reforms to policy and regulation in the energy and telecommunications sectors.
- Encourage governments to release more of their internal reports and working documents, so that infrastructure decision making can be made more transparent and contestable.

Essential Indigenous infrastructure

 Develop a policy framework for the planning, prioritisation, funding, delivery and management of infrastructure in remote Indigenous communities. The framework will focus on a greater role for Indigenous communities in infrastructure decision making.



ndigenous infrastructure



01. Implementing change – Australia's infrastructure in 2012 and beyond

The Port of Townsville is a focal point within the Mount Isa Townsville Economic Zone (MITEZ). Infrastructure Australia has supported local organisations in developing their long-term vision for the Townsville region and the broader corridor to north west Queensland. Australia needs to invest in value-enhancing infrastructure projects that will shape our cities, regions and economy and provide national benefits for years to come.

Our goal

Infrastructure Australia's goal is to work with governments, industry and the community to adopt a national, strategic approach to infrastructure investment which addresses long-term social and economic objectives.

Specifically, its objective is to ensure that investment in infrastructure acts as a catalyst to:

- raise productivity in order to increase the prosperity of the nation and improve Australia's international competitiveness;
- improve the standard of living and quality of life of Australians; and
- secure sustainable development of our cities and regions.

Key challenges

Our key challenge is to ensure that the decisions we make about infrastructure today will serve us well now and into the future.

In addressing this challenge, we must overcome:

- weaknesses in strategic planning;
- funding constraints; and
- other inefficiencies in infrastructure markets and the use of infrastructure.



One of the major challenges facing Australia is how to address 'peaks' in the use of the nation's infrastructure networks. When they are not managed, transport peaks are characterised by inefficient use of resources.

The way forward

To make the most of current and future opportunities, we need to refine how the nation plans, funds and manages its infrastructure. All stakeholders need to focus efforts on improving the following areas:

- A. strategic planning establishing credible, long-term infrastructure planning practices, including improved asset management and greater application of measures to utilise existing infrastructure more efficiently;
- B. funding and financing increasing the pool of funds available to invest in new projects and using more efficient financing mechanisms, particularly in partnership with the private sector. The success of this approach is dependent on addressing two longterm challenges:
 - facing up to the fiscal gap confronting governments – the cost of proposed projects will almost certainly exceed the funds likely to be available for spending on infrastructure;
 - willingness to pay there is a substantial 'disconnect' between infrastructure expectations in the community and the nation's willingness to pay for infrastructure; and
- C. governance and reform making infrastructure provision more responsive to market demand by improving existing regulatory arrangements and by broadening the application of user charging.

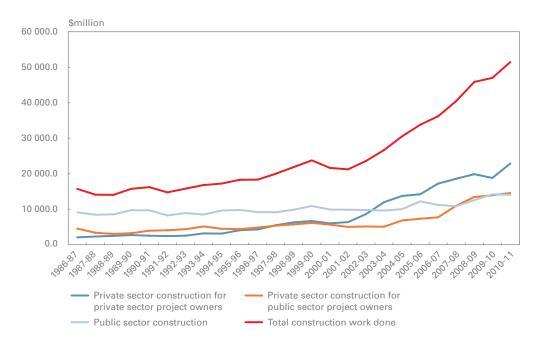
The three areas above are inter-related. Improvements in one area are likely to lead to improvements in other areas.

Infrastructure Australia will continue to work with governments and business in an effort to facilitate this integrated approach to infrastructure reform. We will take a lead role in clarifying the community's infrastructure aspirations and acceptance of the trade-offs necessary to achieve our infrastructure goals.

Infrastructure report card 2011-12

The report card below is aimed at providing readers with a quick overview of major developments in the infrastructure sector. Although the focus of the report card is primarily on developments in 2011-12, it is striking that, compared to a few years ago, progress has been made on many fronts. Infrastructure features more prominently in national debates. The quality of infrastructure planning has improved. Governments have started to implement important regulatory reforms, and, across the country, there is an acknowledgement that the funding of our infrastructure requires some tough decisions.

Figure 1 – Infrastructure construction activity (real terms)



Source: Engineering Construction Activity, Australia (ABS catalogue No. 8762.0), adjusted by chain volume index

Strategic planning, funding and governance

Minister Albanese's decision to involve senior industry representatives at meetings of the Council of Australian Governments' Standing Committee on Transport and Infrastructure will prove historically significant. It will bring much needed industry and user input to the Committee's deliberations.

Governments have been responding to the infrastructure funding challenge by spending more on infrastructure. They have also increased their partnering with the private sector in delivering the nation's vital infrastructure (see Figure 1).

Infrastructure NSW's 20-year State Infrastructure Strategy is expected to bring a new degree of rigour to infrastructure planning in that state.⁵ Integration of the transport agencies in New South Wales into one body – Transport for NSW – is a great step forward, and brings New South Wales into line with other jurisdictions. The release of the Council of Australian Governments' Reform Council's report on capital city strategic planning systems in April 2012 was a significant milestone in better understanding the strengths and weaknesses of how we plan our cities.⁶ The Reform Council found that jurisdictions had taken steps to improve their strategic planning systems during the course of the review. On the other hand, the report also showed there is room for improvement. Current planning systems are only partially consistent with the criteria set by the Council of Australian Governments.

The Australian Government's *National Urban Policy* recognises the importance of our cities to national productivity and wellbeing, and reaffirms the importance of good planning to achieve well functioning cities.⁷

The Infrastructure Finance Working Group brought government and the private sector together to develop possible solutions to Australia's infrastructure funding challenge. The Working Group's report will help steer reform in this area. There have been important developments in exploring alternative infrastructure funding sources with the proceeds from the recent sale of the Sydney desalination plant and the intended privatisation of Port Botany being directed towards addressing New South Wales' infrastructure backlog.

The recent release of the *National Infrastructure Construction Schedule*⁸ for the first time provides potential investors and constructors with detailed information on upcoming major infrastructure projects across all three levels of government.

The National Public Private Partnership Working Group has engaged with overseas agencies in efforts to improve the public private partnership market in Australia. In addition, the Australian Government is progressing work examining better mechanisms for demand risk transfer to the private sector for toll roads.

Indigenous communities are showing considerable interest in taking on a greater involvement in infrastructure decisions.

Transport

The 2012-13 Federal Budget's funding of the Goodwood and Torrens Junction projects in Adelaide means that governments have now supported all of the ready to proceed projects from Infrastructure Australia's original 2009 infrastructure priority list.

These projects were the final investments necessary to allow 1,800 metre trains to run between Perth and Melbourne. At present, trains are limited to 1,500 metres. The 20 per cent increase in permissible train lengths will dramatically improve freight productivity on this corridor.

In addition, some large transformative projects identified on Infrastructure Australia's priority list have moved ahead, including the Moorebank intermodal terminal, the Brisbane Cross River Rail project and the Pacific Highway corridor project.

In terms of transport reform, the Council of Australian Governments is considering the *National Ports Strategy* and Infrastructure Australia has presented its advice to the Australian Government on the *National Land Freight Strategy Update*. The strategies represent an important national approach to planning for these important infrastructure networks. Infrastructure Australia has consistently emphasised the importance of one national set of rules for achieving national productivity objectives. The agreement by the Council of Australian Governments to establish single national laws and single national regulators for heavy vehicle, rail and maritime safety by January 2013 – reducing 23 regulators down to three – is an important step in this direction.

The Council of Australian Governments' *Road Reform Plan*⁹ is, however, making slow progress in the area of road pricing reform.

Energy

The Australian Energy Market Commission continues to progress important regulatory reforms with important refinements to the remote energy connection rules. In addition, following four years of network regulation by the Australian Energy Regulator, the Australian Energy Regulator's regulatory framework is under review by the Australian Energy Market Commission.

This follows proposals from the Australian Energy Regulator and the Energy Users Association of Australia to change the rules according to which the Australian Energy Regulator undertakes its regulatory functions. The Australian Energy Market Commission's review is broad ranging, considering: the framework for assessing capital and operating expenditure; expenditure incentive arrangements; the cost of capital; and the efficiency of the regulatory process.

Water

The Productivity Commission's report on urban water reform¹⁰ emphasised the need for ongoing reform to improve the efficiency of this sector. The sale of the Sydney desalination plant is an important step in terms of introducing greater competition in bulk water supply in the Sydney basin.

Telecommunications

Release of a 2012-2015 rollout plan for the National Broadband Network has provided the community with an indication of the direction and phasing of this large project.¹¹

A. Strategic planning

Our strategic planning goal

Our goal is to improve strategic planning in order to identify and prioritise the best infrastructure options to achieve our national objectives in a world that is changing rapidly on many fronts. The measure of our success lies in selecting projects and making other decisions which address the nation's long-term social, economic and environmental objectives.

Key challenges

To achieve this goal, infrastructure decision makers in Australia need to:

- pursue a goal and problem-solving approach to infrastructure decisions, rather than selecting projects and then 'reverse engineering' the projects into a plan or assessment framework in an attempt to align them with long-term objectives;
- acknowledge and communicate the opportunity costs associated with their decisions – in other words, recognising that a commitment to build a piece of infrastructure means that the funds in question are not available for other projects;
- factor in climate change and environmental considerations in long-term strategic planning;
- integrate infrastructure and land use planning;
- explore effective alternatives to building new infrastructure; and
- undertake project development and due diligence on projects that is commensurate with the scale of the investment and project risks.

The way forward

Infrastructure Australia seeks to support governments and other key stakeholders in planning the development and management of our infrastructure networks over the long-term.

Infrastructure Australia is therefore taking a lead role in:

- working with governments and industry to implement the *National Ports Strategy* and the *National Land Freight Strategy Update*;
- ensuring strategic planning for cities and regions makes infrastructure a prime consideration;
- identifying and protecting infrastructure corridors for future development;
- improving asset and demand management practices to better maintain existing infrastructure as an alternative to building new infrastructure; and
- supporting the development of intelligent infrastructure solutions to optimise investment in new and existing infrastructure.

Improved strategic planning

Good practice: planning infrastructure for the long-term

Infrastructure Australia is pleased to note that some jurisdictions are:

- extending infrastructure planning horizons beyond 20-30 years;
- adopting infrastructure planning practices that reflect the principles of Infrastructure Australia's *Reform and investment framework*;¹²
- aligning plans and project selection with long-term strategic objectives;
- committing resources to long-term strategic planning;
- collaborating with multiple stakeholders to develop plans; and
- investing more in project development.

To realise the benefits of these efforts, decision makers could now use the planning process as a means of identifying and prioritising infrastructure projects. This is the next step we need to take to increase the benefits of our infrastructure investment.

Progress is positive but there is significant opportunity for improvement

It is evident from submissions to Infrastructure Australia that, in general, jurisdictions still have some way to go to ensure individual projects are selected on the basis of being the most efficient and effective option for achieving national (as well as state and territory) strategic priorities.

All jurisdictions state they want to encourage greater public transport use and reduce congestion. Despite this aspiration, most are reluctant to apply tolls or road pricing which would drive the shift to public transport as well as defer the need for much of the planned investment in roads.

Prioritisation of proposed projects within a portfolio of potential investments requires further attention. This approach will improve government and public understanding of the opportunity costs and benefits of investing in some projects and not in others. Making progress on this front will enable decision makers and the public to debate more openly the ability of projects to make a balanced contribution to meeting the national objectives.

Infrastructure advisory bodies

Last year, Infrastructure Australia welcomed the creation of Infrastructure NSW and the Tasmanian Infrastructure Advisory Council.

Infrastructure Australia supports the work of these state-based advisory bodies, as they bring additional due diligence and a critical eye to:

- sub-national or regional infrastructure projects; and
- nationally significant projects

in their respective jurisdictions. This work increases the level of attention on individual projects, as well as providing better transparency for the community.

The work of these state-based advisory bodies, together with infrastructure planning at the local government level, improves Australia's ability to identify a clear pipeline of integrated infrastructure projects and reforms.



Infrastructure Australia supports the efforts of jurisdictions and proponents that have adopted robust, best-practice planning methodologies. We expect this will enable jurisdictions to identify and prioritise worthwhile, productivityenhancing projects, and reject sub-optimal projects.

In the short to medium-term, the Mount Isa Townsville region is likely to see increased movements of both rock phosphate and magnetite (pictured). The potential for large tonnages in the longer term may require a somewhat greater bulk commodity focus in freight infrastructure.

Mount Isa Townsville Economic Zone (MITEZ)

The Mount Isa Townsville Economic Zone was formed by a group of seven councils and major businesses in the Mount Isa to Townsville corridor. It groups organisations with common economic and social objectives and commercial and administrative interdependencies.

In May 2012, the Mount Isa Townsville Economic Zone released its *50 year freight infrastructure plan*¹³ which focusses on:

- building awareness of the nationally significant Mount Isa to Townsville supply chain;
- increasing private sector investment; and
- providing a basis for working with the Australian and Queensland Governments to identify and deliver freight infrastructure needs.

Infrastructure Australia supports the efforts of the Mount Isa Townsville Economic Zone. In particular, we are encouraged that the plan:

- aligns with the principles of the *National Ports Strategy* and *National Land Freight Strategy Update*;
- considers the whole freight corridor, as opposed to looking at road, rail and port separately;
- focusses on the need for robust economic modelling of demand and supply in order to make informed decisions;
- highlights the need to optimise the use of existing assets and then to identify capacity constraints; and
- identifies funding and demand management options such as access pricing and time of day pricing.



The floods in Queensland in 2010-11 utterly disrupted the Queensland community and economy. The cost of repairing damaged infrastructure has run into billions of dollars, funds that could otherwise have been available for new projects. Climate change is expected to lead to an increase in major flooding events and place further demands on infrastructure budgets.

There is consensus amongst the vast majority of climate scientists that human activities are a significant contributor to global warming.

Climate change and environmental impact

Over the course of this century, climate change is expected to impact on many aspects of Australians' lives.

Infrastructure Australia agrees with the Australian Green Infrastructure Council that the variability of future climate conditions internationally and across Australia poses challenges to designing and operating infrastructure assets.¹⁴

Jurisdictions are rightly taking account of these heightened challenges in long-term infrastructure planning, investment decision making and project development.

Jurisdictions should incorporate the vision set out in the Green Infrastructure Council's *Guideline for Climate Change Adaptation*¹⁵, specifically to plan for infrastructure that:

- has the capacity to be more resilient against intense, frequent storm events, extended droughts, increased temperatures, variable precipitation patterns and sea level rise inundation;
- provides more reliable regional transport networks to prepare for and recover from natural disasters;
- protects coastal urban areas from rising sea levels and storm surges; and
- does not need regular retrofitting and is not based on short-term solutions, thereby 'future proofing' infrastructure and economies for future generations.

The Australian Green Infrastructure Council recently launched its *Infrastructure Sustainability rating scheme*.¹⁶ The scheme aims to provide a comprehensive rating system for evaluating sustainability across design, construction and operation of infrastructure.

The primary approaches to responding to the climate change challenge in infrastructure are:

- adaptation assessing risks to infrastructure from extreme events, and understanding how asset management and the design and location of assets can be adapted in consideration of these risks; and
- **2. mitigation** addressing the threat of climate change through measures to reduce the level of carbon emissions.



Effective corridor protection includes looking for opportunities where corridors can be shared, such as this example in the south of Perth (Kwinana Freeway). Over the last 20-30 years, various transport projects have been developed without a rigorous assessment of whether modifications to the design of the new investment might enable concurrent or future re-alignment of other links.

Corridor protection

Decisions taken in the past, and those we make now, to preserve corridors for infrastructure development are critical to addressing issues such as traffic congestion, freight movement, water security and energy supply. For example, the M1 and EastLink in Melbourne and the M4 and M5 in Sydney were developed between the 1980s and 2000s on corridors that had been reserved and protected since the 1950s and 1960s.

If we do not set aside corridors for designated uses now, we risk them being 'built out'. The result is spiralling costs – particularly in road and rail infrastructure, where tunnelling can multiply costs by around 10 times – and, consequently, fewer funds for investment in other projects. The Council of Australian Governments' Reform Council's review of capital city planning systems identified corridor protection as an area of weakness in current planning systems. Infrastructure Australia has recommended to the Minister for Infrastructure and Transport that work is required to develop a national corridor protection strategy. Key elements of the strategy will include:

- taking a truly long-term view of Australia's development (not less than 50 year horizon);
- agreement on key corridors requiring protection;
- identification of stable funding regimes for the progressive acquisition of the corridors – in order to remove those outlays from year-to-year budget cycles, where there is always a temptation to spend on short-term 'wants' at the expense of longterm needs; and
- joint governance arrangements.

The Council of Australian Governments' Reform Council's review of capital city planning systems identified corridor protection as an area of weakness in current systems.

Improved asset and demand management

High profile projects are often exciting and provide taxpayers with tangible evidence of where their money is going.

While new infrastructure is necessary, in some cases, effective asset and demand management can delay the need for new infrastructure or provide an alternative solution to addressing the infrastructure challenge.

In contrast, poor asset management can result in run down infrastructure requiring expensive restoration from funds that would have been used elsewhere, including on new infrastructure.

Asset management

There is significant scope for improvement in the way Australia manages its assets. In many cases, we have been making shortterm decisions about investment, maintenance and renewal that are not sustainable over the long-term. This is exacerbated by, and at times driven by, the funds available at the time. Effective asset management can expand our infrastructure capabilities by helping jurisdictions to:

- avoid significant costs in building new infrastructure;
- reduce life-cycle costs;
- improve infrastructure users' satisfaction by better matching levels of service with what users want – and are willing to pay for;
- foster transparency in decision making, allowing stronger public confidence in stewardship; and
- be more sustainable, by having long-term plans that provide equitably funded services across generations.¹⁷

It is crucial that we take a longterm view in respect of our assets, to ensure we are investing our resources in the most efficient and most effective way.

A leading edge approach to asset management

The Institute of Public Works Engineering Australia (IPWEA) is providing leading edge asset management guidance in Australia, and internationally, that supports long-term planning for infrastructure. IPWEA has developed a program to raise the profile and knowledge of sustainable management of community infrastructure, with a focus on:

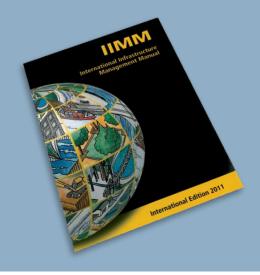
- improved stewardship of assets;
- better asset management planning; and
- improved financial management of existing assets.

Within Australia, IPWEA has traditionally worked with local governments to improve asset management, concentrating on whole-of-life asset management and promoting accountability for asset management by governments.

It is pleasing that many local governments have commenced working on these improvements, providing an example to other jurisdictions and the private sector.

IPWEA's work has been recognised internationally. The organisation is influencing the work of groups such as the asset management expert task force for Federal Highways in the United States and local governments in Canada.

Infrastructure Australia supports IPWEA's moves to expand its influence beyond local government to public works and public infrastructure management in general. Infrastructure Australia encourages jurisdictions to access the guidance provided by IPWEA to assist them to adopt robust asset and financial management frameworks to best manage their infrastructure assets.



Demand management

Part of the cost of infrastructure and our cost of living is driven by peak use. In many infrastructure systems, peak capacity is very expensive, compared with base loads. Similarly it can be very expensive to achieve extremely high standards of reliability.

Some systems need to have the highest standards of reliability, for example, energy and water supply in hospitals. Equally, elsewhere there would be merit in a community debate about appropriate standards in infrastructure to be informed by the additional costs or savings of different acceptable levels of reliability.

There are opportunities to employ demand management to optimise our investment in infrastructure, particularly road and energy infrastructure. Managing demand can: assist in reducing or redistributing demand away from peak times or routes and can delay or avoid the need to increase capacity; improve environmental outcomes by reducing greenhouse gas emissions; and decrease congestion to improve the liveability of our cities.

To achieve effective demand management, jurisdictions need to:

- be prepared to fully explore the costs and benefits of using cost-reflective pricing to manage demand, and to implement user charging where the benefits clearly outweigh the costs; and
- increase the quality and level of information about the demand for and use of transport networks.

Infrastructure Australia recommends two key improvements:

- the introduction of more robust demand modelling and risk assessments in strategic planning and project development; and
- 2. the increased use of intelligent infrastructure to gather and analyse demand information on infrastructure networks and to use this information to influence demand.

Intelligent infrastructure

Intelligent infrastructure involves using information and communications technology to collect, transmit and analyse information about infrastructure assets and networks.

Gathering, analysing and utilising this data provides better information about current inefficiencies and opportunities, as well as enabling improved forecasting for more informed infrastructure investment decisions and infrastructure management in future.

Intelligent (or smart) infrastructure represents a relatively low cost option for improving the performance of our existing infrastructure, in addition to expanding the capabilities of future investments.

This is true both in urban and regional areas.

Intelligent urban infrastructure

The metropolitan planning strategies of most state and territory governments are predicated on accommodating at least 50 per cent of population growth within established areas. Developing and implementing smart urban infrastructure solutions could play an important role in optimising infrastructure within infill areas and fostering sustainable development of our cities.

Infrastructure Australia encourages all levels of governments to use information and communication technologies that enable smart urban infrastructure outcomes. These activities include:

- sending real-time information to network operators and customers; and
- remote sensing information that helps network operators to manage demand, for example load indicators on roads and bridges.

Smart infrastructure – Ausgrid

IBM has successfully implemented a smart grid data management platform, designed and built with Ausgrid, to give the utility more data from part of its electricity distribution grid.

This data creates a foundation that will provide better monitoring and asset management capabilities for the local 11,000 volt distribution network that connects small street-side substations with major zone substations.

The platform involves the integration of monitoring devices that provide accurate and timely information about asset utilisation and performance on this part of the network. The data is collected centrally to provide a holistic view of parts of the electrical network across the company's electricity grid.

The solution also has the capability to provide data that identifies faults and outages within the grid when combined with smart substation equipment and technology. Once this technology is in place, consumers are expected to benefit from Ausgrid's improved ability to gain enhanced information on outages. This could minimise the extent of disruption to services and instigate quicker response times to repair faults.

The future

In an effort to improve strategic planning for infrastructure, Infrastructure Australia intends to:

- assist in preparing robust longterm strategies which consider how our decisions now will shape future cities and regions;
- identify and prioritise worthwhile projects to form the basis of a national infrastructure pipeline; and
- work with governments and the private sector to implement the actions identified in the National Ports Strategy and National Land Freight Strategy Update.

B. Infrastructure funding and financing

Our funding and financing goal

Infrastructure Australia's goal is to increase the pool of funding available for infrastructure investment and to facilitate the broader application of more efficient private financing mechanisms.

Key challenges

The primary constraints on the funding pool available for infrastructure investment are:

- our willingness to pay taxes;
- general government expenditure is projected to exceed revenues in future years, restricting the allocation of tax revenues to infrastructure investment; and
- a reluctance to broaden the application of cost-reflective pricing, particularly on roads.

Government funding

Governments have difficult funding decisions to make and must make sure they use scarce funds wisely, by building worthwhile projects that enhance productivity, improve liveability or realise other important national outcomes.

As shown in Figure 1, the fiscal gap at the national level will start to grow appreciably within the next 20 years. On current parameters, the gap grows to around 2.75 per cent of gross domestic product by 2050 (almost \$40 billion per annum in current terms), excluding interest payments.¹⁸

Under current arrangements, state and territory governments do not have sufficient room in their budgets to fund the level of infrastructure required and still retain credit ratings.

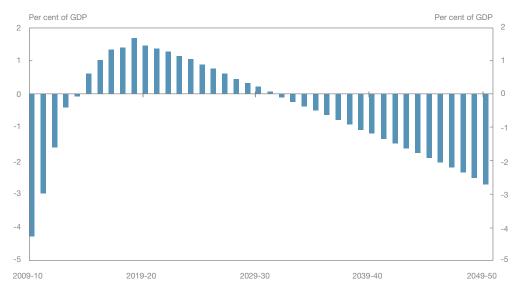


Figure 2 – Australian Government projected fiscal gap

Source: Australian Treasury, Intergenerational Report 2010

Whilst there are differing capacities to borrow in the short-term, all governments also face long-term fiscal pressures, constraining the level of infrastructure spending in the future.

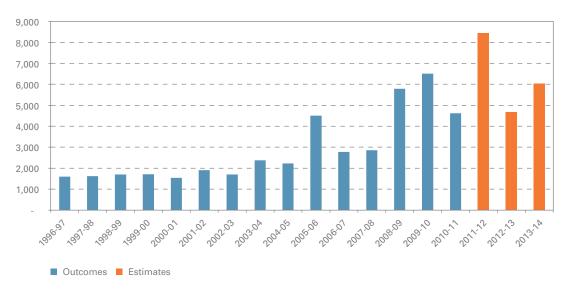
Governments will continue to be called upon to support projects that are not suitable for user charging, for example public hospitals, public schools, national parks and prisons.

The crucial question is: if we are to re-allocate funds, where should we reduce spending? None of this is easy. It involves careful discussion and decision making.

In the following sections of this report, Infrastructure Australia identifies a range of ways forward on this issue. The primary constraints on the broader application of more efficient private financing are:

- a relatively small number of projects that propose private financing; and
- the lack of a project bond market that would provide debt that matched the 20-30 year term of privately financed infrastructure contracts.

Figure 3 – Australian Government land transport infrastructure outlays (\$ millions – nominal dollars): 1996-97 to 2013-14



Source: Infrastructure Australia analysis of data from the Department of Infrastructure and Transport

Infrastructure funding refers to how the infrastructure is ultimately paid for, such as government funding (from tax revenue) or user charges.

Infrastructure financing describes the ways that money is raised to pay for the construction of an asset, typically with a mix of private debt and equity.

Increasing financing options will potentially allow more projects to be progressed. Ultimately, though, every project must be funded or paid for, whether it is by customers paying a user charge or through governments using tax revenue.

The way forward

Governments will need to take action to address the funding challenge. There are multiple ways governments can increase the pool of funding for infrastructure. Some of these approaches will be unpopular, as they involve usage charges or increased taxes or, conversely, sacrificing service levels or expenditure on other national interests.

Infrastructure funding options include:

- government funding examining options to increase the allocation of government funding for infrastructure from the existing revenue base. In addition, governments could review their existing asset holdings to identify opportunities for recycling capital into new projects; and
- user charges expanding the application of user charges to fund new infrastructure, as well as incentivising more efficient use of infrastructure.

Availability charges may be useful as a means of funding some projects, although such availability charges ultimately represent a claim on future government budgets. Widespread use of this funding model would therefore have implications for the size of the fiscal gap facing many governments. The application of cost-reflective pricing to economic infrastructure has proven very effective in the communications and energy sectors. Private investors are very keen to participate in these sectors. The broadening of this approach to the transport sector could significantly reduce the draw on general government revenues.

Crucially, for a project to proceed, the benefits the country and community will enjoy must outweigh the costs of the project. Thus, users paying for infrastructure (or the government) will receive a return on their investment, through improvements in quality of life and national productivity gains.

Therefore, whilst our focus in this section is on actions to increase the pool of funding available for new projects, it is imperative that decision makers, whether government or private investors, employ funds efficiently.

User charges

Given the prospective fiscal gap, there appears to be little option other than to apply user charging more widely. User charging can be used to:

- recover costs of investment, increasing capacity for funding new infrastructure projects; and
- manage demand and send clear signals to the market of the need for new investment.

Pricing mechanisms such as user charging are already in place in a number of sectors in Australia, for example in water, electricity, gas, air travel and telecommunications. In these sectors, few people expect these services to be provided free of charge. The nature of user charging means that it is more applicable to economic infrastructure, for example, toll roads and ports, rather than social infrastructure projects such as schools and hospitals. The major review of taxation, *Australia's Future Tax System* (2010)¹⁹, dedicated substantial attention to the inefficiencies that are generated by the absence of cost-reflective pricing mechanisms in the operation of transport infrastructure. Specifically, the review recommended that:

- governments should consider introducing network-wide variable congestion pricing on roads and that the use of revenues should be transparent to the community;
- governments should accelerate the implementation of costreflective mass-distance-location pricing for heavy vehicles and the revenues generated should be reinvested in the maintenance of the roads used; and
- on routes where road freight is in direct competition with rail that is required to recover its capital costs, heavy vehicles should face an additional charge on a comparable basis. This approach should only be taken where it improves the efficient allocation of freight between transport modes.

Reviews for state and territory governments, for example the Schott report and Lambert review to the New South Wales Government²⁰, have also urged wider adoption of a user pays approach to funding for infrastructure.

Infrastructure Australia supports these recommendations and will incorporate them in progressing work to facilitate increased understanding of this issue across the community.

The nature of user charging means that it is more applicable to economic infrastructure, for example toll roads and ports, rather than social infrastructure projects such as schools and hospitals.



Gateway Bridge, Brisbane, Queensland.

Concerns about the cost of living and infrastructure charges

Increases in infrastructure-related charges, especially water rates and power bills, have been a source of growing concern for households and governments. The media has given extensive coverage to the pressure – real or perceived – that rising utility charges have been placing on household budgets.

Governments have responded in various ways. Some have placed a cap on rises in utility prices. Others have ruled out introducing new types of charges.

Concerns about the cost of living probably explain, in part, why no government has been prepared to move to introduce even modest changes to the way we pay for our transport infrastructure.

Recent evidence suggests, though, that over the long-run, infrastructure charges have not increased as a proportion of household incomes.²¹ The graph below shows that utility charges did not increase as a percentage of household expenditure between the mid 1980s and a few years ago, while transport outlays increased only slightly. On the other hand, the data in Figure 3 only covers the period to 2009-10. Many of the reported increases in utility charges have occurred in the last year or two, and some of the increases will only take effect over the next few years.

Equally, the graph does not show the differences between households with different incomes. For lower income households, basic necessities including utilities and transport represent a larger share of household income.

We cannot escape the fact that the maintenance, operation and expansion of our infrastructure networks have to be paid for. There are 'no free lunches'.

How these costs are shared between different groups in society is ultimately a question of social policy.

What is clear, though, is that we have to consider more closely the costs of our infrastructure networks. Investment in efficient, well scoped infrastructure is one way of moderating cost increases in the long-run.

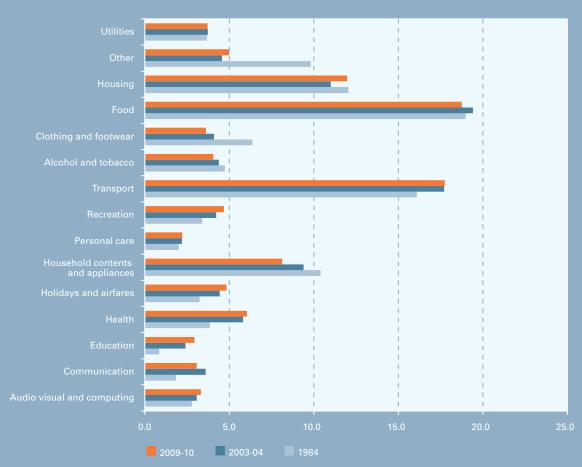


Figure 4 – Expenditure shares, per cent of household total expenditure (1984, 2003-4 and 2009-10)

Source: National Centre for Social and Economic Modelling (2012), drawing upon Australian Bureau of Statistics data from the Household Expenditure Survey

Balance sheet review

Governments will continue to fund a high – if not the highest – proportion of Australia's public infrastructure projects. However, there are increasing challenges in balancing the desire for governments to fund large new infrastructure projects, maintain the highest level credit ratings and achieve budget surpluses.

Most state and territory governments have relatively limited capacity on their balance sheets for additional borrowings if they are to retain their credit ratings. It may be possible in many cases to increase investment capacity for priority projects by reallocating capital from existing assets. Infrastructure Australia has been tasked with working with governments and the private sector to promote opportunities for private sector participation, as well as investigating alternative funding sources for infrastructure. In line with these objectives, Infrastructure Australia is aiming to work with governments to identify assets:

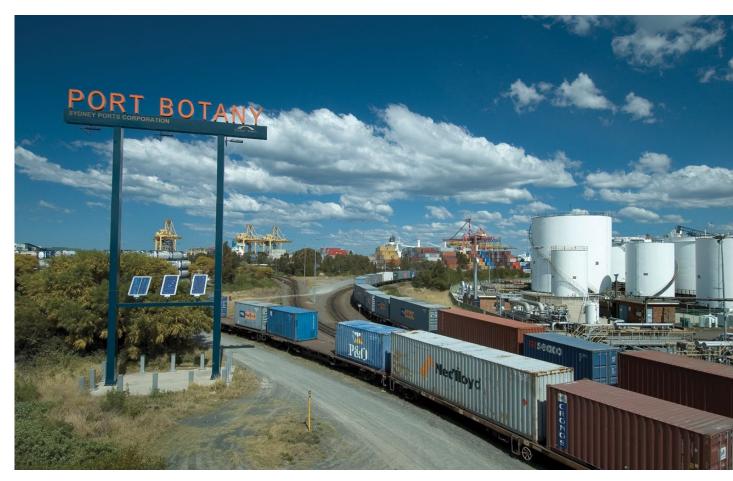
- which have a commercial focus, an appropriate regulatory regime and would be suitable for potential sale;
- where efficient pricing for use of the asset could be introduced or extended; and
- that have the qualities that private sector infrastructure investors would be attracted to, including a reliable and secure earnings stream.

This involves assessing each major asset on a case-by-case basis to identify and quantify economic efficiency gains and potential asset proceeds. An audit of assets should also identify opportunities for the better use of existing assets.

The New South Wales Government has announced its intention to re-invest part of the proceeds from its sale of a long-term lease of Port Botany in the state's infrastructure. This approach to recycling capital is one that other jurisdictions could usefully consider.

This is a key step towards enhancing the infrastructure investment pipeline. It can:

- attract private sector expertise for infrastructure management;
- introduce or extend efficient pricing models across the existing range of assets; and
- attract funding from superannuation funds with a preference for lower risk, existing assets.



In September 2011, the New South Wales Government announced its plan for a long-term lease of Port Botany. Proceeds from the sale are to be invested in Restart NSW – a fund established to deliver projects identified by the New South Wales Government. These include upgrades to the Pacific Highway and Princes Highway. The New South Wales Government aims to complete the transaction by mid 2013.

The options for increasing funding to invest in projects are limited to:

- 1. increasing government expenditure on infrastructure, through:
 - a. increasing taxes; and
 - b. reducing expenditure in other sectors;
- 2. broadening the application of cost-reflective pricing; and/or
- 3. selling government assets to liberate funds for new infrastructure projects.

In addition, governments could spread the benefits of their outlays by re-examining the nature of proposed projects. This might involve:

- a. delaying projects or not building them;
- b. reducing the scope of the projects or staging them; and
- c. reducing service levels (and therefore the costs of the project).

Superannuation

Australians have made significant investments through contributions to superannuation funds, in expectation of an ability to draw on these to finance their retirement. In order to protect and increase this ability, any investment by superannuation funds into infrastructure needs to earn a risk-weighted return on the capital invested.

Infrastructure Australia is aiming to reconnect the public and the nation's infrastructure through Australians' superannuation savings. At present, around five per cent of superannuation funds are invested in infrastructure assets.

Action is required to reduce impediments to market efficiency and to match assets with investors. This would provide a pool of funds for new infrastructure investment, alleviating the pressure on government capital. The potential benefits of infrastructure investment by Australian superannuation funds include:

- an increase in Australia's productivity, competitiveness, and quality of life arising from investment in well-conceived projects;
- individual financial benefits these are well documented and include:
 - long-term, stable income streams;
 - inflation protection (helping with liability-matching);
 - potential for tax savings in some cases;
 - relatively low default rates; and
 - diversification potential, due to low correlations with other assets classes such as equities and bonds.

Reforms to procurement processes

A healthy infrastructure market is critical to improving value for money in infrastructure delivery. The key enablers to a healthy infrastructure market are a strong pipeline of worthwhile projects, significant participation by the private sector, high levels of competition for projects and efficient government procurement processes.

Infrastructure Australia is endeavouring to strengthen all of these areas:

- Infrastructure Australia's infrastructure priority list seeks to provide projects that the community, governments and the private sector can have confidence in;
- in its assessment of projects, Infrastructure Australia seeks to ensure that the potential for the private sector to improve value for money through bundling design, construction, operations, maintenance and financing is fully explored;
- Infrastructure Australia is actively facilitating the entry of offshore engineering, construction, operations and financing firms into the Australian infrastructure market; and
- Infrastructure Australia has just completed a major infrastructure procurement benchmarking study aimed at making outstanding procurement processes business as usual.

The procurement benchmarking project has identified quantitative and qualitative benchmarks for the aspects of: alliance; design and construct; and public private partnership procurement processes that have the greatest potential to impact on efficiency. A key objective is to reduce the costs of participation in the process by both the public and private sectors, ensuring that government can be confident it will get a robust technical, service and commercial outcome.

Skills development

As noted in the 2011 report, skills development in the infrastructure sector remains a pressing issue. Industry, working with governments, needs to increase its investment in formal training and on-the job skills development.

Without concerted action in this area, the delivery of projects will become increasingly costly and difficult. Skills shortages threaten to drive up project costs, and cause delays where 'key workers' are lost to a project.

The skills challenge is equally relevant at the front end of projects. There is a relatively small pool of professionals, particularly in government, with the requisite skills and experience to consider project funding and financing issues at the earliest stages of a project's life.

As more and more projects are necessarily developed by the private sector and funded other than through government grants, the country will need more skilled professionals who can look at plans and projects from a financial perspective. We need people who can pose and answer the question, "how does this project need to be structured in order for it to be privately financed?".

The Infrastructure Finance Working Group

The Australian Government established the Infrastructure Finance Working Group in June 2011 to identify barriers to attracting private investment in public infrastructure and to develop options to overcome those barriers.

The Group was constituted as a sub-committee of the Infrastructure Australia Council and comprised two Council members and key stakeholders from the finance sector. A lack of projects, rather than a shortage of private capital or lack of investor appetite, was identified as the major impediment to greater private sector investment in public infrastructure.

The Group proposed a three-pronged approach: reforms to augment current infrastructure funding streams; improved infrastructure planning to provide a deep pipeline of projects; and further streamlining of procurement processes.

The future

Infrastructure Australia recommends that:

- state and territory governments initiate reviews of their governmentowned assets to identify their potential for sale or lease to the private sector. This exercise should be used to facilitate an informed public debate about the arguments for and against retaining these assets in government ownership; and
- the Australian Government considers linking future infrastructure expenditure to state and territory government balance sheet reform as a reward mechanism.

As part of the balance sheet review, Infrastructure Australia intends to work with governments and government trading enterprises to nominate assets in each jurisdiction that could be sold to superannuation funds, either immediately or after introducing minor changes.



Development of our young infrastructure professionals is vital to the future of Australia's infrastructure sector. Skills from planning to project delivery will be required.

C. Governance and reform

Our goal

Infrastructure Australia's goal is to work with governments, industry and the community to drive the implementation of reforms to improve the management and use of our infrastructure.

Key challenges

The Organisation for Economic Co-operation and Development (OECD) 2010 review of regulatory reform in Australia described Australia as 'one of the front-running countries in the Organisation for Economic Co-operation and Development in terms of its regulatory reform practices'.²² In another publication in the same year, though, the OECD noted the need for further reforms in infrastructure regulation.²³

As a nation, we have deep experience in regulatory reform. During the 1990s, energy, water, telecommunication, seaports, airports and rail were all, to varying degrees, subject to reforms.²⁴ Actions to liberalise trade, reform the labour market and increase competition have been identified as the most likely causes of the surge in productivity during the 1990s. So why did we slow the pace of regulatory reform? In some cases, once reform took place, there was a perception that further reform was not needed. Additionally, Australia's extended run of economic success may have lessened our sense of urgency for change.²⁵

The standout absentee from the long list of reforms in the 1990s is our roads. Despite record levels of spending over many years, roads are also the area of greatest perceived infrastructure need.

There are widespread community concerns about the state of our roads and congestion. Road safety is an ongoing concern for the community, notwithstanding a long-run reduction in road deaths. And there are claims of substantial backlogs in road infrastructure maintenance in regional Australia. Some progress has been made in moving to national regulation for road safety, but structural and pricing reforms are urgently needed to ensure management of our roads is not constraining economic growth and adversely impacting on our quality of life.

It is important that governments recognise this need and implement changes where they are needed. This is an opportunity to initiate another surge in productivity and improve our international competitiveness by increasing the efficiency of our national freight network, our urban roads, and, in turn, our international gateways.

As noted in chapter 3 of this report, commencing a trial of B-triple trucks on the Hume Highway would demonstrate a commitment to substantial reform in the regulation of our roads.

The way forward

Successful regulatory reform depends on effective communication and cooperation between different levels of government and industry. It is important to recognise that we are working toward the same objective: increasing Australia's prosperity and making it an even better place to live and do business.

The future

Infrastructure Australia will continue to work with governments and industry to drive reforms to enable the implementation of long-term national infrastructure strategies and the Infrastructure Finance Working Group's recommendations to improve the availability of funding and financing for infrastructure investment.



Iron ore cars at Dampier, Pilbara region, Western Australia

Regional Infrastructure Fund

The Australian Government established the *Regional Infrastructure Fund* to invest some of the proceeds of the resources boom to address urgent infrastructure needs, while supporting the mining industry, boosting export capacity and developing regional economies.

The objectives of the Regional Infrastructure Fund are to:

- promote development and job creation in mining communities, and in communities which support the mining sector;
- provide a clear benefit to Australia's economic development, and to investment in Australia's resource or export capacity; and
- address potential capacity constraints arising from export production and resource projects.²⁶

Infrastructure Australia will work with state and territory governments to identify priority regions based on mining supply-chains from mine to port. Infrastructure Australia will then work with governments to establish priority infrastructure projects.

Infrastructure Australia developed best practice guidelines specifically for regional infrastructure planning to ensure jurisdictions develop plans with reference to national strategic priorities.

The Office of the Infrastructure Coordinator will assess economic infrastructure project submissions using its *Reform and investment framework*. Plans and projects will also be assessed against the objectives of the *Regional Infrastructure Fund*.

Based on these assessments, the Infrastructure Coordinator will provide recommendations to the Minister for Infrastructure and Transport.

Raising the profile of Australia's infrastructure-related challenges

Through a series of conferences, Infrastructure Australia is seeking to improve the level of public knowledge and informed debate around key infrastructure themes. These events are based on Infrastructure Australia's key areas of focus: strategy and planning, funding and financing, and governance and reform.

Infrastructure Australia's 2011–12 conference series

Infrastructure finance (November 2011)

Aim: to test the options for improving the viability and efficiency of private financing of infrastructure.

Outcomes: Conference participants agreed that:

- the Infrastructure Finance Working Group had identified most options that have the potential to improve the viability for private financing of infrastructure; and
- the conference was a positive development in consulting with industry and providing opportunities for input on policy development.

Connecting the Dots (February 2012)

Aim: to widen the debate on how the planning, prioritisation, funding, delivery and ongoing operation of infrastructure in remote Indigenous communities should be reformed.

Outcomes: the response to the conference was positive, and participants embraced the opportunity to discuss their positions. Over two days, the conference:

- confirmed that fundamental reform in infrastructure planning is required;
- recognised the need for communities to have a much stronger role in infrastructure decision making and governance mechanisms, supported by targeted capacity building initiatives in Indigenous communities; and
- endorsed the idea of exploring funding pools in each jurisdiction rather that multiple funding streams. For example, charitable and corporate funding could be 'pooled'. Development of a simple cost benefit analysis tool tailored to the needs of Indigenous communities could assist in prioritising essential Indigenous infrastructure.

Ports and cities (March 2012)

Aim: to foster informed discussion amongst key industry, government and user groups about the importance of long-term port and city planning for national productivity outcomes. Australia is highly urbanised and nearly all of our cities are based around internationally significant ports. Ports are increasingly drawing the attention of international bodies such as the Organisation for Economic Cooperation and Development.

Outcomes: Conference participants agreed on:

- the importance of stakeholder engagement for the development of long-term plans for each of Australia's major ports and relevant infrastructure in the regions they serve; and
- the need to identify and protect corridors for existing and future transport and infrastructure links to ports.

User pays – exploring the myths of free infrastructure (March 2012)

Aim: to raise awareness about infrastructure funding challenges, and to focus discussion on the opportunities and issues associated with the wider application of a user pays approach to funding infrastructure.

Outcomes: The conference:

- raised significant attention in the media, increasing debate in the wider community as well as amongst conference participants; and
- explored a deeper understanding of the politically sensitive nature of user pays, the basis for resistance to this concept, and approaches to addressing those concerns.

Infrastructure Australia intends to facilitate future events on the quality of drinking water in regional areas, user pays (roads), and road safety and national productivity.

Further information on Infrastructure Australia's conference series can be viewed at http://www.infrastructureaustralia.gov.au/conference_series.

