Australian Government

Nation Building Program

Nation Building: Driving Australia's Productivity

May 2012

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Nation Building:
Driving Australia's Productivity

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Key policy areas that offer large potential productivity gains include skills, innovation, tax, business conditions – and infrastructure. This booklet focuses on the role transport infrastructure plays in Australia's productivity and identifies what the Australian Government is doing to drive Australia's productivity forward.

Contents

Opposite: Photograph courtesy of WestNet Rail.

May 2012

The performance of our transport system is critical to the international competitiveness of Australian businesses, which are increasingly reliant on transport links to receive inputs and to deliver goods to domestic and global markets.

Minister's Introduction

The pressure on Australia's transport system has never been greater.

By 2030:

- Australia's freight task will double.
- The volume of container movements through our ports will be approximately 2.5 times what it was in 2007.
- International passenger movements through our capital city airports will almost triple.
- Public transport usage will increase by one third with 2 billion passenger journeys every year.

By 2020, congestion in our cities will cost us around $20 billion a year if no action is taken.

To service this growth and support the productivity opportunities it brings, the Australian Government has delivered record amounts of direct investment in our national road, rail and ports infrastructure. At the same time, historic reforms have cut red tape and delivered lower costs to business.

Australian Government funding for roads is two times higher than it has ever been. For rail, it is ten times higher. Such expenditure is only justified if it delivers genuine benefits – and the Government's Nation Building Program is proving to be a very sound investment for our future.

- This year alone, Nation Building projects will save the road freight industry $600 million and rail freight $100 million.

Through the Building Australia Fund and the Nation Building Program, the Australian Government has committed more than $7 billion in major public transport projects. Since coming to office in November 2007, the Australian Government has committed more to public transport than all other Federal Governments combined since Federation.

To complement our record infrastructure investment, the Australian Government has delivered significant reforms to the transport sector.

- Infrastructure Australia has developed a stronger national approach to planning and has created a pipeline of priority projects providing clarity to State and Territory Governments and to investors.
- Reforms in the maritime, rail and heavy vehicle sectors will replace 23 regulatory authorities with just three national bodies – saving up to $30 billion.
- National Ports and National Land Freight strategies have been commissioned.
- Work is well underway through the COAG Road Reform Plan to bring about more efficient investment in, and use of, land transport infrastructure. These reforms are estimated to deliver potential net benefits of up to $7 billion.

Looking to the future, Australia's position in the Asia Pacific region is providing enormous opportunities for Australia's exports in goods and services, including advanced manufacturing, tourism, energy and mineral commodities – and a further means to boost national productivity.

The next phase of the Nation Building Program will build upon the successes of the current program and further lift productivity by ensuring that the nation is well-placed to take advantage of the opportunities before it.

Anthony Albanese
Minister for Infrastructure and Transport

Opposite: Pacific Highway Upgrade, Sapphire to Woolgoolga.
Photograph courtesy of Roads and Maritime Services, NSW.

The Productivity Imperative

Photograph courtesy of the Department of Transport and Main Roads, Queensland Government.

Productivity is essential for our economic prosperity and for improving the standard of living for all Australians. Productivity tells us about the efficiency of our economy. There are many factors that determine productivity, including innovation, research and development, human capital and infrastructure. But ultimately, improvements in productivity come from the decisions of business, and how efficiently they are able to produce goods and services.

The Australian Government's role in productivity is to create an environment that facilitates sound decision making by business and helps to build the capabilities – in human and knowledge capital and infrastructure – that business needs to make productivity improvements.

Infrastructure and transport are especially important in creating this environment. Transport, for example, contributes five per cent to Gross Domestic Product (GDP) and is of particular importance to productivity. Together, transport and infrastructure are critical enablers of productivity, by efficiently moving people and goods across our vast nation, and connecting our nation to the global economy.

Across the globe, there is overwhelming evidence showing the effectiveness of infrastructure investment. For example, the International Monetary Fund has estimated that every dollar invested in infrastructure boosts economic activity by up to $1.80. Quality infrastructure is a key pillar of international competitiveness and has positive impacts on economic growth.

Investment in infrastructure and transport is also important given the challenges we face in the future. There are those we know are coming, such as global shifts in economic power and influence, demographic changes reducing our workforce as a proportion of our total population and our tax revenue base, and the projected doubling of the national freight task by 2030. But infrastructure investment can also help us to prepare for those challenges we have not yet foreseen.

Carefully designed and targeted investments in transport infrastructure will facilitate trade, strengthen competition (lowering costs), and improve specialisation of labour and the sharing of technology and practices. On a practical level, more productive transport benefits all Australians by providing greater access to goods and services with lower costs. The Australian Government directs funding at those projects of greatest national significance and with the greatest potential to improve productivity.

New Perth-Bunbury Highway, Western Australia.
Photograph courtesy of Main Roads Western Australia.

Commonwealth Infrastructure Investment Framework

Photograph courtesy of Roads and Maritime Services, NSW.

We face challenges from increased infrastructure demands, urban congestion, and an ageing and growing population with expectations of maintaining our standard of living. Addressing these challenges requires a clear intent, clear goals and a clear means of achieving them. To this end, the Australian Government has agreed to a set of principles setting out the Government's current framework for infrastructure investment (see table below).

The principles seek to promote reforms in the infrastructure market and maximise the benefits from government infrastructure investment. They also highlight the Australian Government's desire to attract more private sector investment in infrastructure and its focus on nationally significant infrastructure that leads to the greatest productivity returns.

Principles to Address Reforms to the Infrastructure Market	
(a)	The Commonwealth will encourage efficient investment in and use of infrastructure through better functioning price signals
(b)	The Commonwealth will facilitate a transparent and deep infrastructure pipeline in order to reduce uncertainty and encourage private sector investment
(c)	The Commonwealth will encourage greater private sector involvement in infrastructure, including by: ensuring that all proposed projects are fully tested for the scope for private funding; and reducing barriers to entry for domestic and international market entrants in the construction and operation sectors
Principles to Maximise Benefits from Government Infrastructure Investment	
(d)	Infrastructure investment decisions will be consistent with relevant planning and reform agendas, with emphasis on major projects that deliver high economic benefits pursuant to a thorough business case appraisal of project proposals, including the use of cost benefit analysis
(e)	Commonwealth infrastructure investment will be consistent with its overall macroeconomic policies and its fiscal strategy
(f)	Commonwealth investment in economic infrastructure will focus on nationally significant infrastructure that leads to the greatest productivity returns
(g)	Commonwealth infrastructure investment will leverage progress by the state and territory governments on the national reform agenda (such as capital cities strategic planning and national regulatory reforms)
(h)	The Commonwealth will place increased emphasis on project implementation issues upfront in the funding decision process, including examining potential for private sector involvement, procurement and delivery options and financing options

Improved Infrastructure Planning

The establishment of Infrastructure Australia in 2008 was a key step in the recognition of a need for more effective planning for our infrastructure.

Infrastructure Australia is assisting governments to better target the allocation of infrastructure funding. This independent, expert advice is helping to drive the development of a long term, national approach to infrastructure planning and investment.

Through the development of the National Ports Strategy and the forthcoming National Land Freight Strategy, Infrastructure Australia has also focused attention on network-wide planning needs. The development of these strategies is intended to provide for a coordinated, long term blueprint to guide policy and investment decisions into the future. The driving outcome of this approach is to maximise the efficient movement of freight to and from ports and around Australia.

The establishment of the National Infrastructure Construction Schedule by the Australian Government marks another step forward in developing a consolidated pipeline of infrastructure projects. It will for the first time provide potential investors and constructors with detailed information on upcoming major infrastructure projects across all three levels of government.

One of the most important aspects of infrastructure planning and investment is how to address the challenges posed by the growth of our cities. The way in which we plan and manage our cities needs to respond effectively to challenges and harness opportunities. The release of the Australian Government's National Urban Policy marked a key step forward in establishing a long term focus for the future of our cities. It recognises the critical roles of state, territory and local governments, the private sector and individuals in planning, managing and investing in cities. The National Urban Policy sets out the Government's overarching goals for the nation's cities and how we will play a key role in making them more productive, sustainable and liveable.

The Australian Government Department of Infrastructure and Transport (the Department) is currently developing 'Network Strategies' for land transport infrastructure in key areas across the nation. The development of these strategies by the Department will assist in gaining a greater understanding of the critical capacity and safety issues that face our national land transport networks now and into the future. The strategies will draw together and build upon existing plans, including the National Ports and Land Freight Strategies, and the National Urban Policy, as well as the planning work of the state and territory governments. It is intended that the strategies will also identify potential solutions to identified deficiencies, which will help to inform future infrastructure investment decisions.

The Australian Government has also made some significant investments in long term project planning, including:

- the High Speed Rail Study. This two phase study is looking at potential routes linking Brisbane to Sydney, Canberra and Melbourne, and the economic viability of a high speed rail network.
- the Joint Study on Aviation Capacity for the Sydney Region. This study was established to inform future aviation infrastructure planning and investment. It will enable the proper integration of future airport operations with surrounding state land use planning and surface transport networks.
- the Melbourne-Brisbane Inland Rail Alignment Study. This study was established to determine the optimum alignment, as well as the economic benefits and likely commercial success, of a new inland railway between Melbourne and Brisbane. The study aimed to provide the government and the private sector with information to help guide future investment decisions.

Opposite: Photograph courtesy of Sydney Ports Corporation.

Nation Building Achievements

The Australian Government has made a massive investment in our roads, rail and ports through our Nation Building Program.

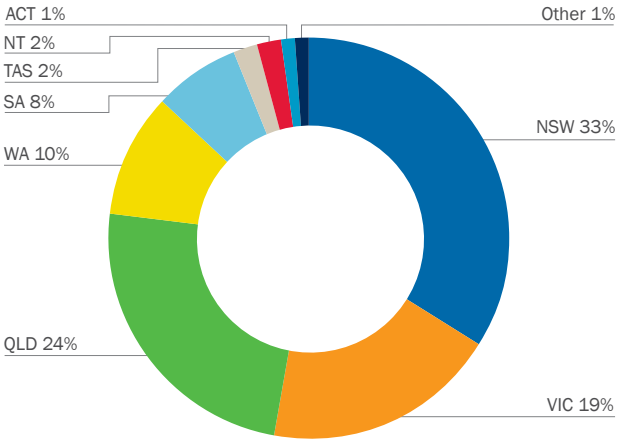
In our first Budget we brought forward $711 million worth of commitments to fast track 14 road projects across Australia. At the same time we made a $1.2 billion investment in the Australian Rail Track Corporation to finance 17 rail projects as a part of a program to significantly improve our national rail network.

Our overall investment under the Nation Building agenda over the six years to 2013–14 totals some $36 billion.

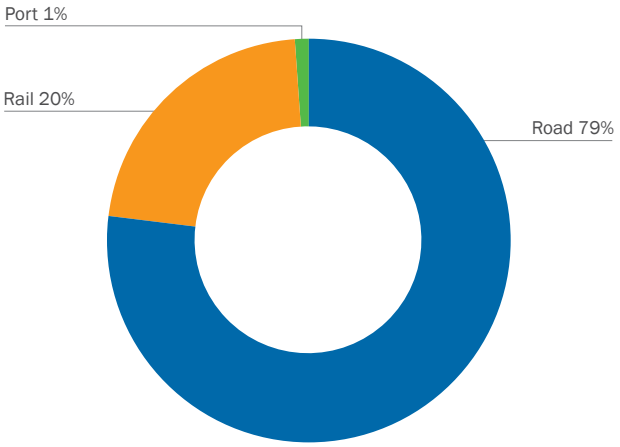
Given the breadth of individual funding programs under the current Program, there have been a wide variety of projects undertaken and outcomes achieved under the Program to date. This has ranged from major road construction activities (such as duplications, bypasses and realignments) and significant rail upgrades being undertaken under the National Network Investment Program, to much smaller, local road projects being undertaken through the Roads to Recovery and Black Spot programs, the construction of heavy vehicle rest areas and the installation of boom gates at level crossings.

With the establishment of the Building Australia Fund we are investing in major road, rail and port projects across Australia based on advice from Infrastructure Australia (see table on next page). The Australian Government has, through the Building Australia Fund and the Nation Building Program, invested more than $7 billion in major public transport projects.

Nation Building Funding Distribution – By Jurisdiction



Nation Building Funding Distribution – By Mode



Photograph courtesy of the Port of Melbourne Corporation.

The Nation Building Program specifically targets projects that will deliver the highest benefits to the nation. The Bureau of Infrastructure, Transport and Regional Economics has calculated the benefit cost ratio (BCR) for 128 road and rail Nation Building projects, accounting for around 91 per cent of the total value of new capital investment being delivered through the current program. The indicative findings from this analysis shows that, as at April 2012, the national average BCR is nearly 2.7 – or around $62 billion in benefits to 2025 (in 2008–09 prices). In terms of direct productivity benefits – largely as a result of travel time savings – Nation Building projects are, in total, expected to save the road freight industry 1.3 per cent of costs and the rail freight industry 2.7 per cent of costs by 2016. In dollar terms, business and freight road users will see annualised benefits of $2.05 billion in 2025, while the rail freight sector is likely to realise benefits of over $300 million in 2025.

Building Australia Fund Projects	AG Funding	Status
Ipswich Motorway – Wacol to Darra	$124 million	Completed
Hunter Expressway	$1.5 billion	Under construction
Pacific Highway – Kempsey Bypass	$618 million	Under construction
Gold Coast Rapid Transit	$365 million	Under construction
Gawler Rail Line Modernisation	$293.5 million	Under construction
Noarlunga to Seaford Rail Extension	$291.2 million	Under construction
Regional Rail Link	$3.2 billion	Under construction
Ipswich Motorway – Dinmore to Goodna	$750 million	Under construction
Majura Parkway	$144 million	In planning
Melbourne Metro One	$40 million	In planning
Ipswich Motorway – Darra to Rocklea	$10 million	In planning
Oakajee Port Common User Facilities	$339 million	In planning
Torrens and Goodwood Junctions	$232.1 million	In planning

Spotlight on Sydney

Sydney Rail Freight Network

The Australian Government recognises that transport infrastructure improvements in Sydney are a vital part of achieving a long term vision for a fast and reliable, highly capable national freight network. In partnership with the Australian Rail Track Corporation (ARTC) and the NSW Government, we are investing over $2 billion to improve Sydney's freight rail network. This substantial commitment will provide additional rail capacity, transit time savings and improved reliability. Other benefits include rail and road truck operating cost savings, road freight congestion cost savings and road freight crash cost savings.

The Australian Government is improving local and national freight distribution by undertaking a $1.1 billion upgrade of the Northern Sydney Freight Corridor (NSFC). A 155 kilometre heavily congested rail line serving both passenger and freight traffic between Sydney and Newcastle, the NSFC is a major link on the interstate rail network servicing Melbourne, Sydney and Brisbane. Importantly, and for the first time, the Government has also put in place arrangements with the NSW Government to ensure the resulting additional rail capacity is reserved for freight.

The Australian Government is investing $175 million to upgrade the Port Botany Rail Line and, through substantial ARTC investment, a $1 billion dedicated freight line is being built in southern Sydney. These upgrades will separate passenger from freight trains in southern Sydney and effectively lift the capacity of the Port Botany rail line by more than 30 per cent resulting in fewer truck movements on the road network in and around Port Botany.

To further boost the productive capacity of Sydney's freight network, the Australian Government will facilitate the development of a major intermodal terminal at Moorebank in western Sydney, to be operational by 2017. Implementation of this terminal facility reinforces our determination to boost productivity and address urban congestion by making our freight networks more efficient. This project will boost Sydney's economy and provide environmental benefits by helping move more freight onto rail. It will also reduce traffic delays on the M5, helping families spend more time together, rather than in the car to and from work. The first step in this process will be the relocation of the Moorebank Defence Units by the end of 2014. See Moving Freight section for more details.

Southern Sydney Freight Line works at Leightonfield.
Photograph courtesy of Australian Rail Track Corporation.

Photograph courtesy of Roads and Maritime Services, NSW.

The Sydney Motorway Network

Sydney's motorway network provides key connections for freight, commercial and commuter traffic, including access to Port Botany and Sydney Airport, servicing local, regional, national and international travel demands.

Growth in population and travel demand will continue to place pressure on this vital network. Improving this network's connections is integral to Sydney's economic productivity. Without improvements, Sydney will become increasingly congested.

It is imperative that future infrastructure investment in the Sydney motorway network is integrated with strategic land use, economic and infrastructure plans.

The Australian Government has committed $92.8 million to the $116 million F5 Freeway Widening project. Completion of this important project in March 2012 has significantly improved the southern access to Sydney and the M5 and M7.

The Australian Government has also committed $30 million for the planning of a M4 East Extension. A M4 East Extension would assist with reducing congestion on the motorway network.

At the request of the Australian Government, Infrastructure Australia with the NSW Government recently explored private financing options for the expansion of the M5 East and the F3 to M2.

The Australian Government is willing to provide up to $25 million to the NSW Government to establish a Special Purpose Vehicle to bring to market these vital transport projects. This would enable private investment in these road projects. The Australian Government support is subject to a matching commitment from NSW.

M5 East tunnel. *Photograph courtesy of Roads and Maritime Services, NSW.*

Fixing the Bruce Highway

Photograph courtesy of Queensland Department of Transport and Main Roads.

The 1670 kilometre Bruce Highway is the major north south transport corridor in Queensland. It provides a strategic link between Brisbane and Cairns and the regional centres, ports and business centres in between. The Australian Government has committed to invest $2.8 billion towards upgrade projects and maintenance works along the Bruce Highway through the Nation Building Program and Regional Infrastructure Fund.

The Highway forms part of the National Land Transport Network connecting the east coast of Australia between Melbourne and Cairns and forms a major freight, transport and tourism route in Queensland. It provides important linkages for major industries such as the rapidly expanding resources, agriculture and tourism sectors.

Traffic volumes along the Highway currently vary from 2500 vehicles per day around smaller towns up to and exceeding 100,000 vehicles per day near the outskirts of Brisbane. These traffic volumes are predicted to rise at a rate of 3 per cent per annum along with increased demand from communities and industries along the Highway.

The Australian Government's investment in the Bruce Highway is aimed at improving productivity and safety while reducing congestion along the length of the Highway. Key productivity enhancing projects include:

- the upgrading of the intersection of the Bruce and Dawson highways, known as the Calliope Crossroads, near Gladstone – Australian Government funding: $150 million. The Dawson Highway forms part of a strategic link between the Gladstone Port and Central Queensland mining, agricultural and industrial enterprises. The project will increase the safety and efficiency of the intersection for all road users while catering for projected traffic numbers on the Bruce and Dawson highways into the future; and
- construction of the $190 million Townsville Port Access Road providing a link between the Bruce and Flinders highways to the Port of Townsville – Australian Government funding: $95 million. This project facilitates the import-export supply chain for north Queensland and the important north western mineral province around Mount Isa/Cloncurry, enabling quicker, more reliable, and cheaper access to the Port of Townsville.

Bruce Highway, Section B (Sankeys Road to Traveston Road).
Photograph courtesy of Queensland Department of Transport and Main Roads.

FEDERAL GOVERNMENT INVESTMENTS ON BRUCE HIGHWAY

Spotlight on Perth

It is estimated that without substantial investment in transport infrastructure, the cost of urban congestion in Perth by 2020 will be $2.1 billion.

Traffic congestion has a major influence on the effectiveness and efficiency of the road network. High levels of traffic congestion can delay passenger and freight movements, and create low travel speeds, driver frustration and increased risk of traffic accidents.

The Australian Government has committed some $700 million under the Nation Building Program and a further $480 million under the Regional Infrastructure Fund to address road congestion. This commitment will improve access to ports, upgrade the interstate and regional road network, including key freight routes, and help ease urban congestion. This funding is focussed on making Perth a more 'liveable city' through improvements to urban infrastructure projects.

The area around Perth Airport and the Kewdale/Forrestfield primary freight hub is critical for the movement of freight and people in Western Australia and the area is expected to experience a dramatic change in traffic volumes and patterns in coming years.

Of particular focus is the capability of the road network to support anticipated growth resulting from increases in the freight task, air passenger numbers and commuter and tourist traffic.

In recognition of the strategic importance of the airport and freight hub, the Australian Government has committed $686.4 million to the $1 billion Gateway WA project under the Nation Building Program and Regional Infrastructure Fund.

The value of the project is reflected in its preliminary benefit cost ratio of 3.2, which means that for every dollar invested in the project, the community can expect to receive benefits of $3.20.

The Gateway WA project will involve widening of the Tonkin Highway between the Great Eastern and Roe highways and intersection upgrades along the Tonkin Highway.

When completed, this project will provide easier access to Perth Airport for domestic and international travel and freight, as well as safer and faster access to Kewdale for freight vehicles, and improved road network efficiency. This will result in reduced congestion, travel times, freight costs, fuel consumption and emissions.

New Perth-Bunbury Highway, Western Australia.
Photograph courtesy of Main Roads Western Australia.

The Australian Government is also providing $4 million towards planning for light rail in Perth. The proposed light rail alignment will link the Perth CBD with the two major specialised centres at the University of Western Australia/Queen Elizabeth II Medical Precinct and Curtin University.

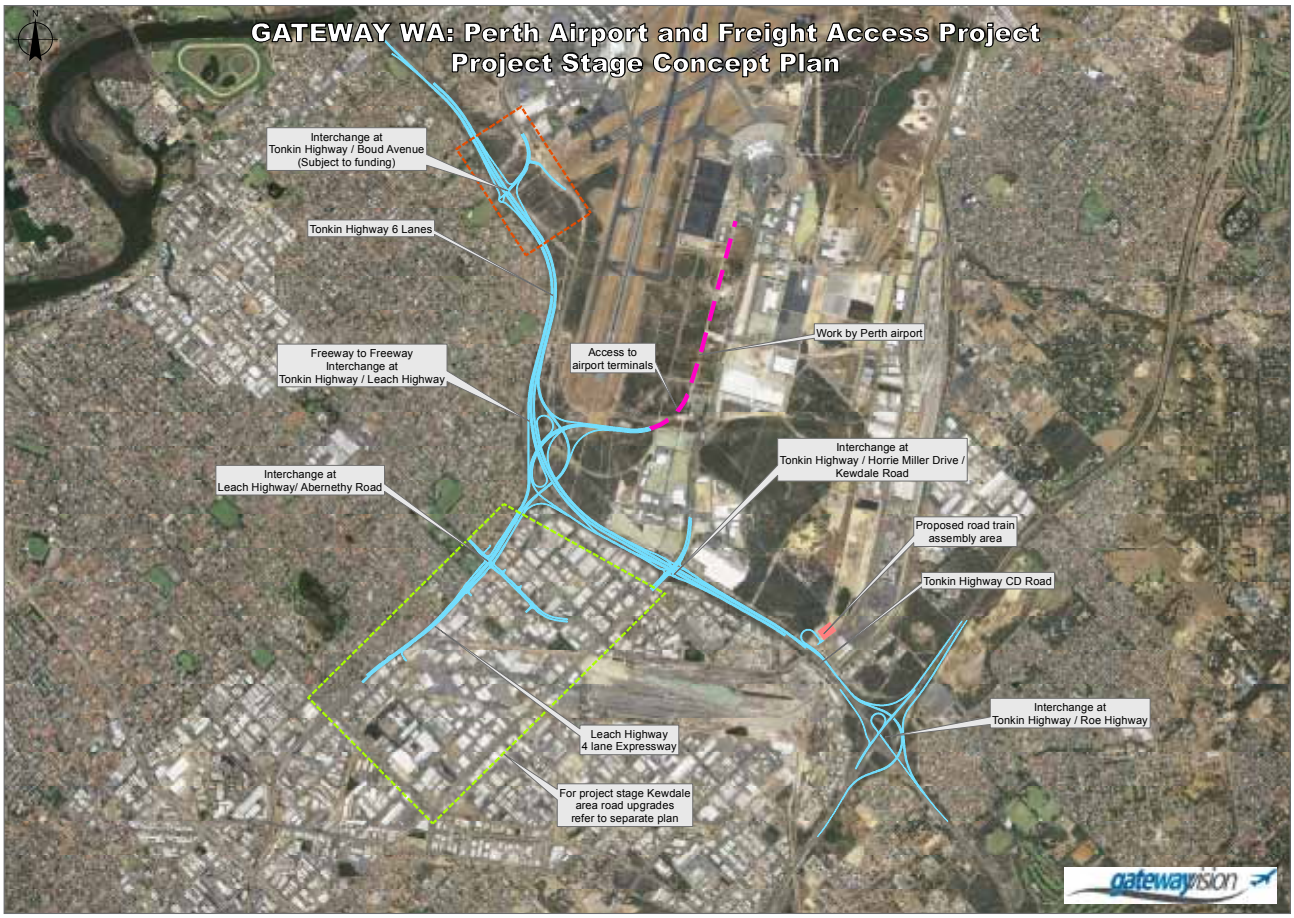
Light rail would meet community travel demands, ease congestion, improve the public transport opportunity to move people around this area of Perth, making it a more enjoyable and productive environment, as well as helping families spend more time together.

To deliver an effective light rail network, the Australian Government is supporting early planning works. This will look at planning and design, procurement models and demand modeling to develop a full Business Case for the project.

The Australian Government is providing $236 million for the $360.3 million Perth City Link project, with the state and local governments providing the remaining amount. These works are consistent with the Australian Government's National Urban Policy objectives of making cities more liveable, and encouraging the use of public transport by making it more accessible.

The Australian Government has also committed funding under the Nation Building Program for a series of other projects that will improve traffic congestion and the rail container supply chains between Kewdale, Forrestfield and Fremantle Port:

- widening the Kwinana Freeway between the Leach and Roe highways ($29 million);
- provision of a new intermodal facility at Kewdale, rail crossing loop and further development of the North Quay rail terminal ($26.8 million);
- widening of the Great Eastern Highway between Kooyong Road and the Tonkin Highway including provision for public transport and cycling (up to $275 million);
- construction of the Great Eastern Highway/Roe Highway interchange (up to $68.8 million); and
- construction of the Reid Highway/Alexander Drive interchange ($10 million).



Next Phase of the Nation Building Program

The Nobel Prize winning economist, Paul Krugman, wrote that *'Productivity isn't everything, but in the long run it is almost everything'*.

The Australian Government knows that if Australia is to maintain or improve its high quality of life and remain internationally competitive, economic reform and nation building must be a top priority.

Australia needs to not only invest in new, large scale projects, but to link this investment to its long term planning and reform agendas. We also need to get the most out of our existing infrastructure by finding ways to use it more efficiently.

Through the Nation Building Program, the Australian Government has made a significant improvement to Australia's productivity. As we move into the next phase of the Nation Building Program (NB2), the Government will build on these achievements to continue to address our nation's infrastructure needs.

Through NB2, the Australian Government is renewing its focus on productivity through investment in our national road and rail networks. The overarching objective of NB2 will be to 'lift Australia's productivity through nationally significant land transport infrastructure'. Our investment through NB2 will be focused on four cornerstone themes to support this overarching objective: Moving Freight; Connecting People; Safety; and Innovation. Each theme will consist of three subcomponents, each with their own objective to support and complement the overarching program objective.

The investment that we will make through NB2 from 2014–15 will build upon the successes to date and provide a solid foundation for addressing our transport infrastructure needs into the future. This investment will be made in partnership with state, territory and local governments, as well as with industry, to ensure that the right projects are delivered at the right time.

The Australian Government has already committed to a number of major projects across the nation and through the 2012–13 Budget we have committed to the continuation of the Roads to Recovery and the Black Spot programs. We will work with state and territory governments to further target high priority infrastructure needs consistent with the objectives and themes of NB2.

Objectives of NB2

Lifting Australia's Productivity through Nationally Significant Land Transport Infrastructure.

Moving Freight

To support economic growth through efficient and connected freight networks

Interstate Freight
To enhance productivity of freight networks across the nation

Local Freight
To improve freight connections within cities and regions and improve access to ports

Heavy Vehicle and Rail Freight Productivity
To improve efficiency and capacity of supply chains

Connecting People

To encourage reliable and efficient land transport infrastructure to connect people across the nation

Connecting Cities
To improve connectivity between cities and major population centres

Urban Living
To enhance urban liveability and access to essential services

Pinch Points
To increase capacity and efficiency and reduce congestion in urban areas

Safety

To improve the safety and sustainability of our national road and rail networks

Black Spot
To reduce the social and economic costs of casualty crashes

Roads to Recovery
To repair and upgrade local roads to improve safety and access to services in communities

Network Regeneration
To upgrade, improve and maintain national road and rail networks

Innovation

To enhance, plan for and develop current and future land transport networks

Smart Infrastructure
To optimise the use of urban land transport infrastructure through the provision of intelligent transport systems

Planning and Research
To research and plan for the development of the future land transport network

Evaluation and Compliance
To ensure program objectives are met and value for money is achieved

The largest infrastructure projects can take many years to construct, involve billions of dollars, and once built are with us permanently. It is therefore critical that thorough analysis is undertaken before investment decisions are made.

Targeting the Right Projects

Good, long term planning is imperative in achieving sustained productivity gains. The pipeline of large scale infrastructure projects that needs to be addressed to lift productivity and enhance our way of life is growing as our infrastructure ages.

We need to focus on outcomes, not short term ambitions. Our infrastructure investment decisions need to be closely linked with our strategic planning work and reform agendas to maximise the impacts of our investments.

Infrastructure Australia's work in developing a pipeline of nationally significant projects is making large gains towards ensuring the greatest efficiency in our infrastructure investment. To this end, since its first National Infrastructure Audit in 2008, Infrastructure Australia has released three annual National Priority Lists. Furthermore, Infrastructure Australia ensures that strategic alignment of projects with long term planning is considered through its reform and investment framework, as well as project deliverability.

The Australian Government has accepted Infrastructure Australia's advice and funded all of its recommended 'ready to proceed' priority projects in the Freight and Cities themes from it's 2009 Priority List. This includes the Torrens and Goodwood Junctions project funding announced in the 2012–13 Budget.

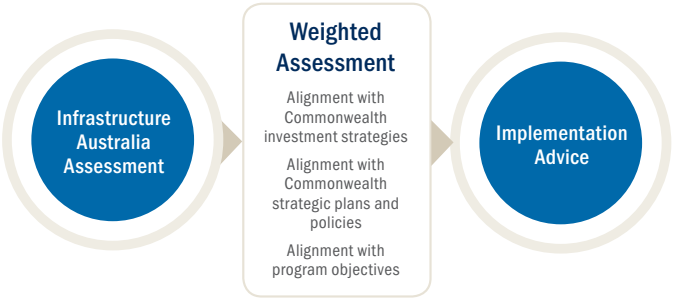
In an expansion of its initial role and to deepen the pipeline, Infrastructure Australia will conduct assessments of all projects over $100 million seeking funding under NB2. In addition the Department will provide strategic and detailed implementation advice. The Department will also review projects under $100 million using a merit based process. Together, these measures will ensure that Australian Government funding is directed at those projects of greatest national significance and with the greatest potential to improve productivity.

Key projects to be funded under NB2 will also be required to demonstrate links to significant national policies including: the Commonwealth Infrastructure Investment Framework; the National Ports Strategy; the National Urban Policy; and the forthcoming National Land Freight Strategy. Funding for major projects will also be tied to conditions in order to best leverage our investment – for example through strong partner funding arrangements with the states and territories, use of intelligent transport systems and a more rigorous application of cost estimation policies.

This will:

- ensure our infrastructure priorities are carefully considered, based on sound economic analysis, and agreed across jurisdictions; and
- provide long term certainty of Commonwealth investment and make every dollar count.

The next phase of the Nation Building Program will take a holistic approach to infrastructure investment – building upon the successes of the first phase to direct funding at projects of greatest national significance, further strengthening our long term planning, and setting clear priorities for the future.



Opposite: Photograph courtesy of Department of Transport and Main Roads – Queensland Government.

Moving Freight

As cities expand, populations rise and the economy grows, the demands placed on freight delivery across the nation expand and increase. From food for the table, furniture for the home, raw materials for manufacturers and export, everything has to be delivered.

The operation of the national freight sector is integral to the wellbeing of all Australians – and its efficiency has a direct impact on national and individual prosperity. Improved efficiency in the transport and logistics industry results in reduced imput costs all the way through supply chains, providing productivity gains across the economy.

The overall freight task for Australia is set to double over the next 20 years. Improvements in freight productivity reduce the cost of moving freight, and benefit other transport users by reducing the number of vehicles on our roads. These improvements in turn reduce accident risk exposure, and deliver travel time savings and the reduction of greenhouse gas emissions.

Australia's remoteness from other countries, its size and the dispersion of its population add to the price of our imports, as well as our locally manufactured goods. This places greater emphasis on the need for efficient internal freight networks.

Through NB2, the Australian Government will:

- provide funding for major projects that improve our road and rail infrastructure on major interstate freight networks and in key growth areas, through an 'Interstate Freight' program;
- provide funding for significant local freight links, including port connections and intermodal solutions, through a 'Local Freight' program; and
- fund projects that are focused on addressing bottlenecks in our supply chains using lower cost, high benefit infrastructure solutions, through a 'Heavy Vehicle and Rail Freight Productivity' program.

Interstate Freight

Targeted at major projects: >$100 million

Projects assessed by IA and Department

Local Freight

Targeted at major projects: >$100 million

Projects assessed by IA and Department

Heavy Vehicle and Rail Freight Productivity

Targeted at projects with high BCRs

Allocation for each jurisdiction

Projects assessed and prioritised by Department

Australian Rail Track Corporation

The Australian Rail Track Corporation is a public entity that is wholly owned by the Australian Government. The Australian Rail Track Corporation was established in 1998 to manage and develop our interstate freight rail network. The Government has made a massive investment of some $2.2 billion in the Australian Rail Track Corporation, to undertake a program of works throughout the interstate freight network. This investment is in addition to the more than $1.1 billion Government investment to improve the capability of the interstate rail network through the Nation Building Program. These works are improving the competitiveness of rail by expanding network capacity and improving transit times throughout the interstate freight rail network, and in particular the North-South Corridor on the east coast of Australia. The improvements will in turn help lower the operating costs for rail operators and end users and improve rail market share.

Northern Expressway and Port Wakefield Road Upgrade

The Northern Expressway and Port Wakefield Road Upgrade project involved the construction of a new 23 kilometre expressway standard road between Gawler and Port Wakefield Road and the upgrade of an 11.5 kilometre section of Port Wakefield Road between the Northern Expressway and the Salisbury Highway. The Australian Government invested some $451 million to this $564 million project, which was completed in September 2010. It will deliver around $2.1 billion in benefits over 30 years.

The project has significantly improved the northern access into Adelaide, which is delivering productivity benefits for regional industries in South Australia. For instance, the new link delivers reduced freight costs for the transport of agricultural products from the Riverland region to the Port of Adelaide for export, with savings of up to 20 minutes in travel times.

Ipswich Motorway – Dinmore to Goodna

The Ipswich Motorway plays a critical role in the transport of freight within Queensland. The motorway links the key resource areas in the Darling Downs and South West Queensland, such as the Surat Basin, and the developing industrial areas in the Western Corridor to Brisbane, including the Port of Brisbane and the major freight terminals in Brisbane's southern industrial hub. On average, the motorway carries around 90,000 vehicles per day, of which over 15 per cent are heavy vehicle movements, with total vehicles forecast to increase to around 140,000 per day by 2026.

The Australian Government has made a $1.76 billion investment in the Ipswich Motorway-Dinmore to Goodna project, with around $4.9 billion in expected benefits over 30 years. The project involves the widening of an eight kilometre stretch of the Ipswich Motorway to six lanes. The upgrade will provide improved access to rail stations, improved facilities for pedestrians and cyclists, and service roads to remove local trips from the motorway. Completion of the project is expected in mid to late 2012.

The upgrade will improve transport efficiency and reduce congestion by providing an improved alignment and by separating local and long distance travel through the removal of some access ramps and the addition of service roads.

Northern Expressway, South Australia.

Photograph courtesy of the Department of Transport, Energy and Infrastructure, South Australia.

Bulahdelah Bypass, NSW. *Photograph courtesy of Roads and Maritime Services, NSW.*

The Pacific Highway Upgrade Program

Both the Australian and NSW governments have had a long standing commitment to complete the duplication of the Pacific Highway by 2016. By the end of the current Nation Building Program in 2013–14 (subject to the required NSW matching funding), it is expected that 63 per cent of the Pacific Highway will be duplicated, with a further 7 per cent under construction.

Between 2012–13 and 2016–17, the Australian Government will make available an additional $3.56 billion under the Nation Building Program. This funding could be made available to the NSW Government, contingent on a dollar for dollar matching commitment up to $3.56 billion, to allow the completion of the Pacific Highway upgrade by 2016. This funding has the potential to increase the Australian Government's commitment to over $7.7 billion.

A Memorandum of Understanding between the Australian and NSW governments is currently being prepared, which will guide the prioritisation and sequencing of the remaining projects required to achieve full duplication.

The overall project has a BCR of 3.2. Completion of the Pacific Highway upgrade will result in a four lane (minimum) divided highway connecting Melbourne, Canberra, Sydney and Brisbane (completion of the Hume Highway upgrade is scheduled for 2013).

Realising this standard of highway connection between Australia's three most populous cities and the National Capital will have substantial benefits for the nation as a whole. Around 60 per cent of Australia's population lives along this Melbourne-Sydney-Brisbane corridor.

Completion will bring major improvements in freight efficiency, an expected reduction in road trauma and benefits to industries and regions made more accessible by the upgrade. Completion of the upgrade will fulfil an objective long held by the north coast community and governments at all levels.

Moorebank Intermodal Terminal

The Moorebank Intermodal Terminal project will relieve the growing pressure on congested infrastructure around Port Botany and the M5 motorway, facilitate a modal shift from road to rail and boost productivity and economic activity.

The Australian Government is facilitating the delivery of a major intermodal facility at Moorebank to provide a rail 'port shuttle' between Port Botany and the south west of Sydney, as well as warehousing and a separate terminal for interstate freight.

The port shuttle terminal, expected to commence operations from 2017, will have capacity for 1.2 million containers, vastly improving efficiency and productivity while relieving congestion on Sydney's roads. Additional capacity for 500,000 containers will become available at a later stage when the interstate freight terminal commences operation.

The project will boost productivity and improve transport links in Australia's biggest city. It will enable freight travelling through Sydney to and from Port Botany to use rail instead of the road network, providing cheaper and more efficient freight and relief for commuters stuck in traffic. The project will also provide a jobs boost for south western Sydney.

The interstate terminal will take pressure off rural and regional roads and build on the Australian Government's $4.8 billion investment in the interstate rail network. Together these investments help make rail freight a real competitor to road freight and benefit everyone in the national supply chain who needs to move goods.

The Australian Government will fund the relocation of the Moorebank Defence Units to make available a 220 hectare site for the project - to provide for the intermodal terminal facilities required now and into the future.

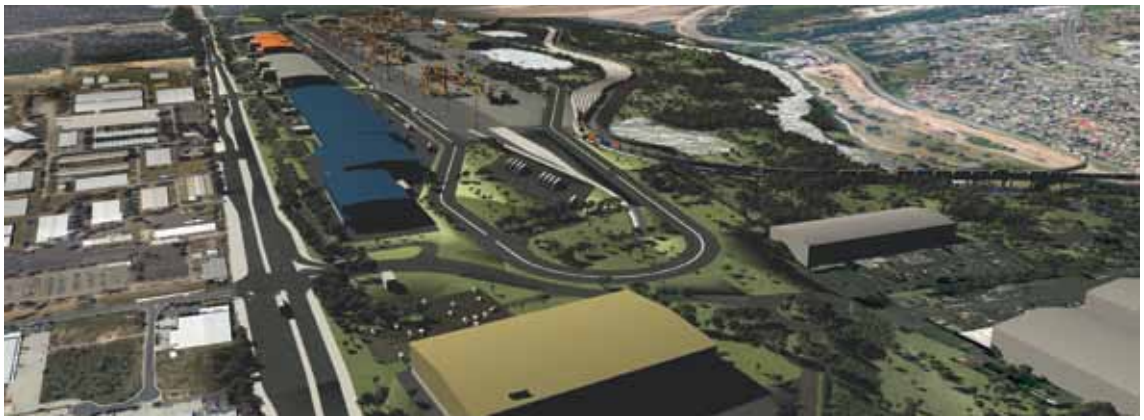
A Government Business Enterprise will also be established to launch the project and optimise private sector involvement. The private sector will design, build and operate the site as an intermodal terminal. Private sector partners will be selected through competitive tender processes.

Key Benefits

The total benefits of the project have been estimated at $10 billion. These include:

- Taking 3300 trucks off Sydney's roads every day from 2020, relieving widespread traffic congestion associated with freight movements to and from Port Botany.
- Faster freight transport and reduced costs to business.
- Reduced fuel use and diesel emissions.
- 1650 full time jobs during construction of the port shuttle terminal and a further 975 jobs during construction of the interstate terminal, with 1700 ongoing jobs in the region once the facility and associated warehouses are open.

This investment demonstrates the Australian Government's determination to invest in strategic infrastructure. Projects like Moorebank link Australia's freight networks and our ports, drive productivity, improve our logistics industries, and create long term efficiencies that will benefit our cities and our economy into the future.



Artist's impression of the Moorebank Intermodal Terminal. *Image courtesy of the Moorebank Project Office.*

Connecting People

Australia is one of the most urbanised nations on earth – nearly two-thirds of Australians live in our capital cities and over 85 per cent of Australians live in an urban area. So for most of us, travelling through an urban area is a daily reality and highlights the importance of our urban transport infrastructure.

Existing congestion problems are also putting pressure on supporting transport infrastructure in urban environments. The costs of congestion nationally are projected to rise to around $20.4 billion by 2020 if no action is taken. Population growth and environmental concerns are likely to increase our reliance on public transport, further emphasising the need for significant investment to keep people moving. Given this, efficiencies that can be gained through public transport and supporting infrastructure is a significant factor in Australia's productivity.

However, despite that we are a highly concentrated population, we also live in a country that spans a vast distance. Our land transport networks, more so than any other means of travel, keep our nation and our communities connected.

Our national highways, our major regional roads, rail links, urban corridors, suburban streets and rural byways are fundamental to our way of life. They are vital connections, and the Australian Government is pursuing an ambitious agenda to ensure the efficiency, productivity and sustainability of those connections.

Through NB2, the Australian Government will:

- continue our longstanding commitment to investment in our national roads and railways (including in regional Australia), to connect people across the nation, through a 'Connecting Cities' program;
- provide much needed investment in our public transport networks, and pave the way for greater investment in active travel, through an 'Urban Living' program; and
- look to pursue high benefit, lower cost infrastructure solutions to ease the burden of urban congestion and increase the capacity and efficiency of our transport networks, through a 'Pinch Points' program.

Connecting Cities

Targeted at major projects: >$100 million

Projects assessed by IA and Department

Urban Living

Stream 1: Major Urban Transport Projects

Targeted at major projects: >$100 million

Projects assessed by IA and Department

Stream 2: Liveable Cities and Active Travel Projects

Projects assessed and prioritised by Department

Pinch Points

Targeted at projects with high BCRs

Allocation for each jurisdiction

Projects assessed and prioritised by Department

High Speed Rail Study

The Australian Government is undertaking a $20 million study on the implementation of high speed rail on the east coast of Australia. This study takes a long term, strategic view of transport needs between Brisbane, Sydney, Canberra and Melbourne. It is taking into account issues such as population growth, regional development opportunities and the liveability and sustainability of our major cities.

The study forms a part of the Australian Government's long-term approach to transportation planning and will consider the role high speed rail has in meeting these needs.

By the middle of the century, long distance travel on the east coast is anticipated to be approximately two and a half times what it is today. This will put increasing pressure on existing transport networks and other infrastructure, which will impact on Australia's productivity and international competitiveness.

International experience demonstrates that high speed rail can move large volumes of people very quickly and efficiently, connect people with jobs and strengthen the linkages between capital cities and major regional centres.

The high speed rail study will help inform government's decision-making on Australia's transportation future and will define the steps which would be required over the short, medium and long-term in developing a high speed rail network.

The first phase of the high speed rail study, completed in August 2011, presented interim findings for corridor and station options, cost, patronage and travel times.

The second and final phase of the study will determine, in greater detail, the technical and engineering requirements of the system, alignment of the track and station locations, costs and patronage. It will also consider the economic viability of the network and recommend financing options along with possible governance arrangements. The study is due for completion in late 2012.

In the 2012–13 Budget, the Australian Government has committed an additional $20 million over four years for national transport planning, including further work on high speed rail.

Gold Coast Rapid Transit

The Gold Coast Rapid Transit project is one of the biggest public transport projects in the country and the biggest transport infrastructure project ever undertaken on the Gold Coast.

The project involves the construction of a 13 kilometre light rail system that will provide rapid access to key strategic locations, such as education and medical facilities, major retail centres, tourism precincts and business and employment areas along the Gold Coast strip.

The project will boost the vital tourism industry and deliver a range of benefits. For instance, in the first ten years of operation there should be a reduction in car trips of about 85 million and a reduction of greenhouse gas by 114,000 tonnes.

Construction commenced in July 2010 and is expected to be completed in 2014. The Roadworks North package of early enabling works was recently completed, stretching three kilometres from the Gold Coast University Hospital site to the northern side of the Nerang River Bridge.

The Gold Coast Rapid Transit project is being delivered as a Public Private Partnership. The Australian Government has already invested its full contribution of $365 million to the project. The Queensland Government is contributing $464 million and the Gold Coast City Council is investing $120 million in the project.

Artist's impression of a seven car vehicle on the dedicated light rail bridge over the Nerang River.
Photograph courtesy of GoldLinQ.

Moreton Bay Rail Link

The Moreton Bay Rail Link project will deliver approximately 12.6 kilometres of dual track rail line to improve public transport access in one of the fastest growing regions in the country.

The project aims to provide increased mobility for this community to access employment, health services and education via public transport, and to enable the development of the region.

Other objectives include reducing road traffic congestion in the area and air pollution by encouraging public transport patronage instead of private car use.

The project will deliver a passenger rail line connecting the existing network at Petrie Station, on the main North Coast Rail Line, and Kippa-Ring (Redcliffe) to the east with six new rail stations at existing and future development areas of Kallangur, Murrumba Downs, Mango Hill (North Lakes), Kinsellas Road, Rothwell and Kippa-Ring.

Construction of the Moreton Bay Rail Link project is scheduled to be completed by 2016.

The Australian Government approved the project business case in early 2012 along with a Commonwealth investment of $742 million between 2011–12 and 2016–17.

The Queensland Government is contributing $300 million and the Moreton Bay Regional Council $105 million to this important infrastructure project.

Safety

Photograph courtesy of VicRoads.

On average, four people are killed and 90 are seriously injured every day on Australian roads. Almost everyone has, at some stage, been affected by a road crash. The annual economic cost of road crashes in Australia is enormous – estimated at around $27 billion a year – and the social impacts are devastating. Besides lives tragically cut short, debilitating injuries often result in pain, grief and suffering that have lifelong impacts on victims, families and communities.

The Australian Government is taking a national leadership role in road safety and providing substantial funding for road safety projects and programs that upgrade our road networks.

Through NB2, the Australian Government is:

- providing for the continuation of the highly successful Black Spot program, to help reduce the social and economic costs of road crashes;
- providing a renewed commitment to the longstanding Roads to Recovery program, which provides vital funding to all local councils to repair and upgrade local roads, improving road safety and access to essential community services; and
- providing a renewed commitment to its investment in road maintenance on the National Network, together with funding for upgrades and improvements to the road and rail networks across the nation, including high priority boom gates and heavy vehicle rest area projects, through a new 'Network Regeneration' program.

Black Spot

Projects to demonstrate BCR of at least two

Threshold increased to $5 million

Roads to Recovery

Spending decisions made locally

Supporting improvements in asset management planning

Network Regeneration

Stream 1: Maintenance

Formula-based allocations for each jurisdiction for maintenance of the national network

Stream 2: Upgrade and Improvement Packages

Allocation for each jurisdiction

Projects assessed and prioritised by Department

Safety: Achievements to Date

Black Spot Program

The Black Spot program provides funding for safety works such as roundabouts, traffic signals, crash barriers and street lights at sites on our roads where there have been serious crashes or where serious crashes are likely to occur.

Over the course of the first phase of the Nation Building Program, including through the Economic Stimulus Plan, the Australian Government will invest a total of $502.2 million in the Black Spot program. This is helping to make our local roads safer for motorists, cyclists and pedestrians. Currently around 300 new projects are approved each year, and each state and territory receives a share of the total available funding based on population and crash data.

Heavy Vehicle Rest Areas

The Heavy Vehicle Safety and Productivity Program aims to deliver improved safety and productivity outcomes for the heavy vehicle industry and other road users through investment in rest area projects, parking bay projects, road enhancement projects and technology trial projects. The specific program objectives are to: reduce the proportion of road accidents involving heavy vehicles by targeting heavy vehicle driver fatigue and speed; and increase productivity by enhancing the capacity of existing roads.

The Australian Government is investing $70 million through this important program between 2008–09 and 2011–12. This investment has already seen the delivery of over 200 projects across the country.

Boom Gates for Rail Crossings

Serious accidents at rail crossings across Australia have highlighted the need for action to address the risks faced by road and rail users at these intersections. Tragically there are around 100 accidents at level crossings around Australia every year.

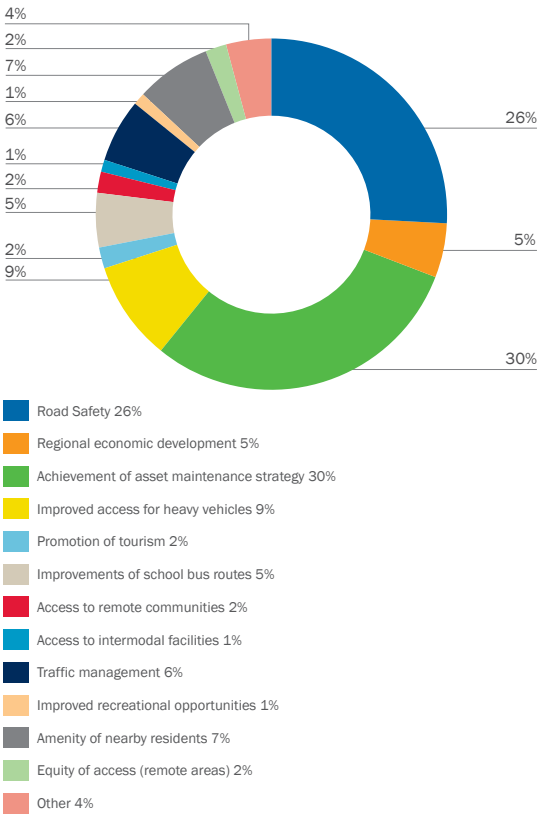
The Australian Government has provided $150 million through the Boom Gates for Rail Crossings Program to improve safety at rail crossings. The Program provided for the installation of boom gates and other active safety measures at 300 high risk rail crossings across Australia. This has improved safety for road users, train drivers and pedestrians.

Roads to Recovery Program

The Roads to Recovery program provides funding to all councils (and state/territory governments responsible for roads in unincorporated areas with no councils) for the maintenance and/or upgrading of their local roads. These are the roads used daily by Australians to access their homes, schools, businesses, regional centres and major highways.

Over the course of the first phase of the Nation Building Program, the Australian Government is providing $2.1 billion ($350 million per year) through the Roads to Recovery program. This investment is expected to provide for the delivery of around 20,000 projects. Each council has a set allocation of funding over this period and councils choose the road projects on which they will spend their Roads to Recovery funding according to local priorities.

Key Outcomes of 2009–2014 R2R Program to Date



Safety: Achievements to Date

keys2drive

While the number of deaths from road crashes in the 17 to 25 years age group has been reducing over time, in 2011 there were 133 young drivers killed in road crashes on Australian roads. People in this age group account for 23 per cent of drivers killed on our roads, yet represent only 16 per cent of the adult population. The Australian Government launched the *keys2drive* program in 2008, with funding of $17 million over five years to deliver 200,000 free driving lessons to learner drivers and their parents. The program is a national learner driver program that aims to make newly licensed drivers safer on the road.

National Road Safety Strategy 2011–2020

In May 2011, the Australian Government, in cooperation with the states and territories, established the National Road Safety Strategy 2011–2020. The strategy sets out a comprehensive, evidence-based program to reduce deaths and serious injuries by at least 30 per cent by 2020. The strategy sets out 10-year directions for a safer road transport system, with governments committing to a number of first steps, and identifying a range of additional steps for further consideration. It sets out a range of interventions in four key areas: safe roads; safe speeds; safe vehicles; and safe people. The strategy is supported by a comprehensive performance monitoring and reporting regime, and is set to be reviewed in 2014.

Seatbelts on Regional School Buses

The Seatbelts on Regional School Buses program commenced in 2007 and Australian Government funding has been provided to eligible bus operators in regional areas of Australia to fit seatbelts to over 280 school buses and improve safety for kids on school buses travelling on regional roads. School bus safety is one of the priority issues identified for attention in the National Road Safety Strategy 2011–2020. From 2012–13, the Australian Government is providing an additional $4 million over four years to continue the Seatbelts on Regional School Buses program.

Improved Targeting of Funds for Safety

Infrastructure improvements can have a major effect on reducing road crashes. In many cases these interventions are relatively low cost and can provide community benefit worth many times the cost.

Adequate maintenance is also essential to maintain the safety of the National Network and meet the Australian Government's commitment to the National Road Safety Strategy.

The extension of the highly successful Black Spot, Roads to Recovery and Maintenance programs will allow for the continuation of funding for much needed upgrades and improvements to existing roads and railways where there will be a demonstrable improvement in road safety.

Black Spot Program

Over the five year NB2 period, the Australian Government has committed $300 million ($60 million per year) to continue the Black Spot program.

The Black Spot program will continue to fund road safety improvement projects at locations where casualty crashes occur. It will operate under the same rules as the current program, but with an increased threshold from $2 million to $5 million, to allow for more significant safety improvements and treatments to be delivered.

Roads to Recovery Program

The Australian Government has committed $1.75 billion over five years in NB2 ($350 million per year) to continue the Roads to Recovery program.

The Roads to Recovery program will continue to provide funds to local government to repair local road networks. It will operate under the same rules as the current program, but will seek to support improvements in asset management through appropriate planning mechanisms.

Network Regeneration

The Network Regeneration program under NB2 will provide funding for projects that will improve the safety and sustainability of Australia's land transport network by regenerating roads and rail. Funding under this program will be provided in two streams: a notional allocation to each state and territory for National Network maintenance works; and a pool of funding for specific projects related to the upgrade and improvement of roads and railways. This second stream will continue to fund important heavy vehicle rest area projects and boom gates projects.

The maintenance funding will be tied to a set of predetermined conditions, such as requiring state and territory governments to contribute a certain amount of their own funding to maintenance works on the National Network and to maintain National Network roads in their jurisdiction to a specified standard. The second stream of funding relating to upgrade and improvement package works would operate as a collaborative effort between the Australian Government and state and territory governments in identifying the highest priority works to be funded.

Heavy Vehicle Safety and Productivity Program

In the 2012–13 Budget, the Australian Government has committed an additional $140 million over seven years to 2018–19 to continue the Heavy Vehicle Safety and Productivity Program. The continuation of the Program will provide funding for more rest stops, decoupling bays and other road improvements that will benefit the heavy vehicle industry and improve safety for all road users.

Innovation

Our nation's future economic prosperity, the well-being of our people, the sustainability of our environment and positive contributions to global concerns such as climate change, depend substantially on how well our cities function. Urban areas are growing faster than other parts of Australia, and this is reflected in an expected increase in the relative share of the transport task, transport energy use and transport-related emissions coming from urban areas. Our urban environments are also the location of some of our major international gateways for passengers and non-bulk freight.

In our modern society, technology plays an ever increasing role in the way we live our lives. Investing in intelligent transport systems and implementing smart infrastructure approaches has real value. This is especially the case for systems that can relieve urban congestion, enhance the country's freight movements and make our transport systems safe, efficient and more sustainable.

But innovation is not only about the use of new technologies. Undertaking sound planning work, for specific projects and for more strategic, network-wide solutions, allows for the development of innovative solutions to identified problems or infrastructure shortfalls. Undertaking reviews of existing projects also provides an opportunity to assess potential shortcomings in existing approaches, and to identify innovative ways to improve processes and achieve greater value for money for future projects.

The Australian Government is committed to reforming our transport future using innovative solutions and, through NB2, will:

- provide funding for projects that use smart infrastructure technologies to optimise the use of urban transport infrastructure, through a 'Smart Infrastructure' program;
- fund planning and research activities that will guide future investment in the national land transport network, through a 'Planning and Research' program; and
- establish an ongoing 'Evaluation and Compliance' program to assess projects at various points in the project life cycle to ensure program objectives are being met and value for money is achieved.

Smart Infrastructure

Projects >$100 million to be assessed by IA and Department

Projects <$100 million assessed and prioritised by Department

Planning and Research

Projects linked to research priorities

Outcomes focused with tangible outputs

Evaluation and Compliance

Ongoing program of evaluation and compliance activities including veracity of project costs and assessment of outcomes achieved

National Smart Managed Motorways Program

The Australian Government has committed $60 million over four years to 2014–15 to fund projects under the National Smart Managed Motorways program. The aim of the program is to deliver more efficient motorways through the application of modern technology-based solutions to improve real time management of major motorways.

The Australian Government has committed funding to four initial projects in Sydney, Melbourne, Brisbane and Perth that have been identified by Infrastructure Australia. These projects are:

- Sydney: M4 (Western Motorway) – concept design works for the introduction of a managed motorway system, including ramp metering and potential freight prioritisation.
- Melbourne: M1 West Gate Freeway (Western Ring Road to Williamstown Road) – upgrade this section to a level 3 Intelligent Transport System (i.e. lane control).
- Brisbane: Gateway Motorway (Nudgee to Bruce Highway) – introduce pole mounted variable speed limit signs, ramp signalling, travel time signs and variable message signs.
- Perth: feasibility and trials of technology, including ramp metering.

Funding under the program is contingent on co-funding of the projects by state governments and signing of Intergovernmental Agreements on the establishment of single national jurisdictions for heavy vehicles, interstate rail operations and maritime regulation.

Australian Government funding available for further projects under the program is dependent upon funding conditions being satisfied and the level of contributions made by the state governments towards the initial projects.

M80 Ring Road Upgrade – Victoria

The current Nation Building Program includes a number of projects that incorporate smart technology to improve the throughput and safety of motorways. For example, in Melbourne the technology was included in the West Gate Bridge strengthening project (completed in June 2011) and is also part of the M80 Ring Road Upgrade (current sections under construction scheduled for completion by June 2014).

The M80 Ring Road Upgrade is a $2.25 billion project funded to $1.2 billion in the current Nation Building Program by the Australian ($900 million) and Victorian ($300 million) governments. The project is designed to improve safety and reduce congestion on one of Melbourne's busiest roads. This will in part be accomplished by the addition of an electronic freeway management system comprising variable message signs, a lane use management system, freeway data stations, real time information signs and freeway ramp signals. The systems will be controlled by sensors in the road which measure traffic flow.

The project also includes CCTV monitored by VicRoads to manage incidents. Additionally, message boards at regular intervals along the route inform road users of travel times and also warn motorists of traffic hazards or accidents, thus giving them an opportunity to select alternative routes.

Photograph courtesy of Department of Transport and Main Roads – Queensland Government.

Innovation: Looking Forward

An Innovative Future

The costs of congestion nationally are projected to rise to around $20.4 billion by 2020 if no action is taken. This is a key area where the efficiency of our infrastructure affects the productivity of our cities – the adoption of smart infrastructure technologies can help to alleviate congestion and reduce environmental impacts, as well as contribute to improved productivity.

Transport in Australia contributes $42.6 billion per annum (or around 5 per cent) to our total GDP and, accordingly, the efficient movement of people and goods around the nation is critical to productivity growth. The key challenges at a national level for the productivity of Australia's transport systems include a growing and increasingly urbanised population, an increasing freight task, increasing costs of congestion, and increasing costs to the environment.

A key part of a productive economy is about using our assets – making the most of the major transport infrastructure we already have in place. Changes in the way existing infrastructure is used, operated and managed can improve efficiency – and advanced technology is one tool that is opening up this avenue for us. Smart infrastructure can allow traffic to flow faster on a given road, more rail carriages to run on a track, and provide real time safety and road condition messages to motorists.

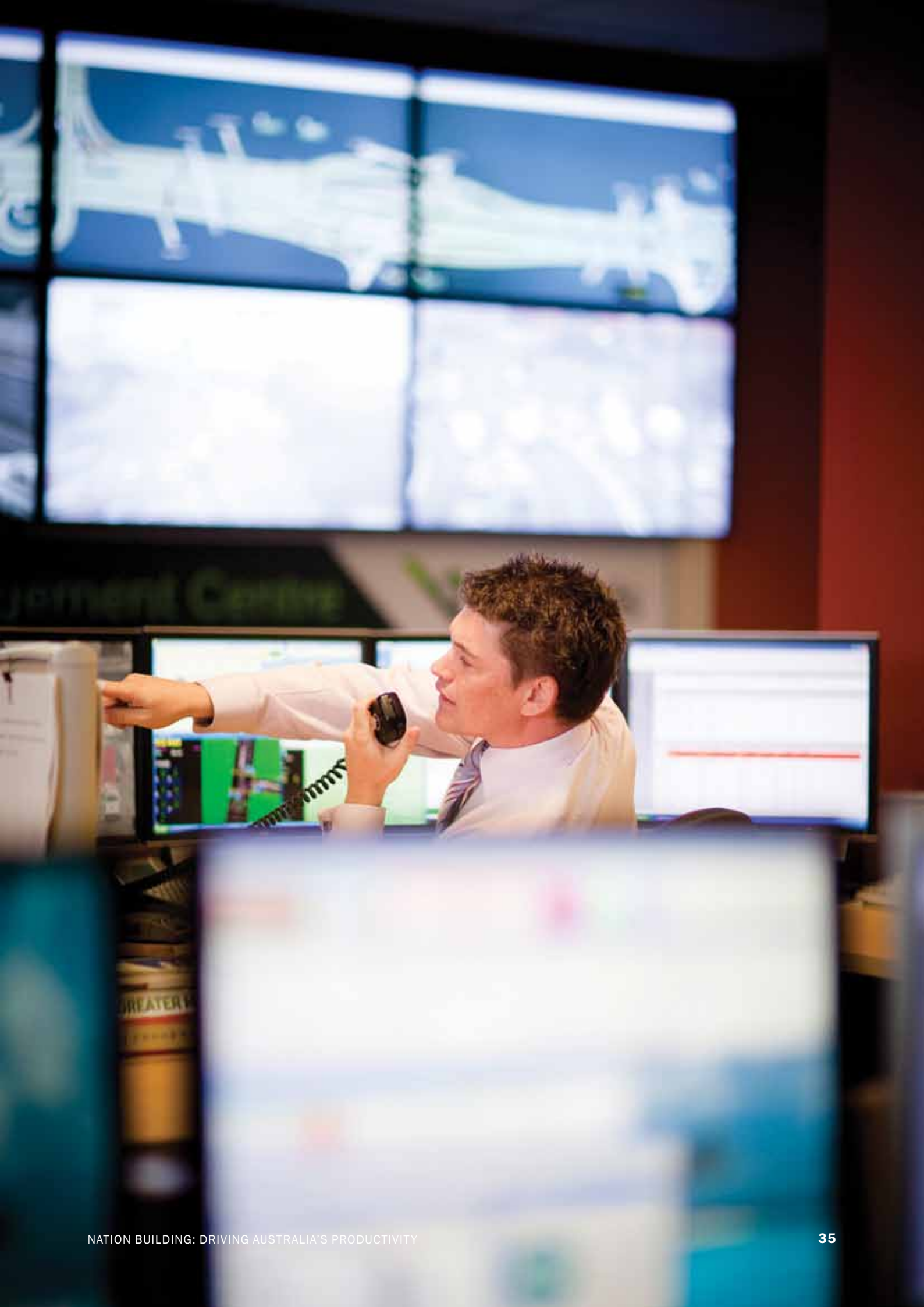
Through NB2's focus on innovation, the Australian Government will not only be investing in improved productivity through innovative optimisation of existing transport infrastructure, but also in innovative approaches to the way we plan, develop, fund and consider infrastructure investment.

Fundamental to this approach is the application of the Commonwealth's Infrastructure Investment Framework. The principles of the Framework relate to addressing reforms in the infrastructure market and maximising benefits from government investment in infrastructure. They highlight the Government's desire to attract more private sector investment into infrastructure and its focus on nationally significant infrastructure that leads to the greatest productivity returns.

Building on this and the Australian Government's microeconomic reform agenda, we will continue to partner with states, territories and industry to identify innovative solutions and improvements to the tendering, delivery and operations of major infrastructure projects. Crucially, these improvements will deliver greater economic productivity for the nation.

Opposite: Photograph courtesy of VicRoads.

Northern Expressway, South Australia. *Photograph courtesy of the Department of Transport, Energy and Infrastructure, South Australia.*



Reforming our Future

There are a range of microeconomic reform initiatives that are being driven by the Australian Government that will also help to boost national productivity by improving the way that our infrastructure is planned, managed, funded and delivered.

This includes the streamlining of approval processes to cut red tape and get projects moving more quickly; simplifying contracting rules through the National Prequalification System; the development and review of the National Public Private Partnership Guidelines; and helping to encourage greater private sector involvement in delivering key infrastructure projects.

National Regulators

The Australian Government recognises that the existing inconsistent and onerous regulatory practices between jurisdictions in relation to Australia's transport industry are severely limiting the efficiency of the $61 billion sector and are constraining national productivity.

In response, the Council of Australian Governments (COAG) has agreed to establish single national laws and single national regulators for heavy vehicle, rail and maritime safety by January 2013. This will reduce the existing 23 regulators down to three.

This reform will eliminate significant inefficiencies in cross-border transport operations, reduce the compliance burden for business, support higher national productivity and enhance safety. The national transport regulator reforms will generate up to $30 billion in economic benefits for Australia over the next 20 years.

Shipping Reform

The Australian Government introduced its Stronger Shipping for a Stronger Economy legislative package to Parliament in March 2012. The Bills will deliver an integrated policy framework designed to revitalise the Australian shipping industry, and increase the number of Australian ships and productivity of the shipping sector.

The shipping reforms will establish a solid platform for investment in Australian shipping by creating a stable regulatory environment and providing internationally competitive fiscal incentives.

The COAG Road Reform Plan

In 2007, COAG agreed an ambitious research and reform agenda aimed at improving heavy vehicle charging and funding arrangements to ensure the more efficient, productive, safe and sustainable use and provision of freight infrastructure.

The agenda, known as the COAG Road Reform Plan, provides an important opportunity to address current and emerging challenges in road transport. This is particularly in relation to servicing a growing freight task at fiscally sustainable service levels.

While focused on heavy vehicle road provision and use, COAG's Road Reform Plan potentially represents the first stepping stone in the economic reform of roads.

INFRA-1357/MAY 2012