

# financing our future



the case for change in financing Australia's infrastructure needs

Strategic Economics | June 2005

Prepared for the Australian Education Union,  
Australian Manufacturing Workers Union,  
Australian Nursing Federation,  
Community and Public Sector Union – SPSF Group,  
and the Rail, Tram and Bus Union.



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# Foreword

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Few communities in Australia today are not handicapped by shortcomings in infrastructure, which detract from their economic performance and/or their broader quality of life. Most have to contend with serious gaps which, as

documented in the Study, seem to be widening, not closing. Indeed, rising public resentment at serious problems in so many areas – including energy, water, transport, housing, education and health – is at last forcing governments at all levels to focus more diligently on the problem.

Several factors help to explain how the present deplorable situation developed. Chief among them has been the strong ideological addiction – at all tiers of government – to smaller public sectors and lower levels of tax and public debt. This has been reflected also in what appealed as relatively easy options for governments, namely extensive privatisation of public assets and resort to PPPs, with very mixed results. Capital availability as such has not been the problem: additional loan and revenue funds could have been raised for infrastructure projects if federal and state governments had been so inclined.

As governments turn their minds to more effective private sector involvement in future arrangements, they will be confronted with a wide spectrum of funding options, from straight public debt raisings through mixtures of public and private debt/equity to outright private sector provision. Ultimately the same pool of national savings will be drawn upon but the different risk/return characteristics of particular categories of infrastructure will warrant a variety of funding models.

Some innovative public funding instruments which have been adopted overseas, should be considered, along with greater recourse to superannuation savings. Industry super funds in particular have a history of investing in infrastructure projects and are keen to increase their exposure as opportunities arise: as investors, tax-payers and consumers of infrastructure services, members of industry super funds have a particular interest in seeing that the chosen funding arrangements strike a reasonable balance from the perspectives of all stakeholders.

There has been a past lack of vision and leadership in the planning and coordination of an effective national response to our infrastructure problems. Perhaps we should not get too excited quite yet, but rising public pressures are generating increased interest in possible national approaches.

**Bernie Fraser**

Independent Director of several industry super funds  
16 May 2005



# Executive summary

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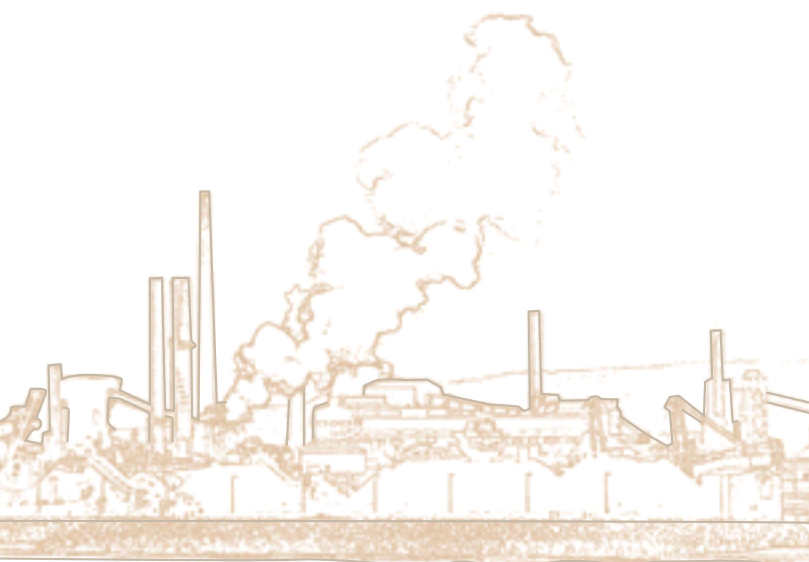
Australia's public infrastructure is in a state of disarray. We have reduced the share of national resources invested in public infrastructure. Our public transport is rundown and unreliable, forcing more people to depend on cars; public hospital waiting lists are extensive, and public education has been starved of resources. We are experiencing regular electricity shortages and we are making few inroads into solving our looming water crisis.

Traditionally, public infrastructure assets are basic installations and facilities that provided long-term economic and social benefits to the community. These facilities underpin the functioning of society and the economy and include railways, roads, electricity and gas, water and social infrastructure such as schools, training colleges and universities; hospitals and community health facilities, public housing and retirement age homes and libraries.

Australians have lived through a long period of economic prosperity in terms of wealth and household income growth but our infrastructure system is unable to keep up with the demand. We have three major infrastructure challenges:

- How can Australia increase the share of Gross Domestic Product that is invested in new public infrastructure to enable us to meet the challenges of a competitive and humane society?
- How can we increase investment in the maintenance and operational expenses associated with existing public infrastructure?
- How do we shift resources into public infrastructure that enhances social and environmental sustainability? This includes public transport, community health infrastructure, public housing and infrastructure that reduce greenhouse gas emissions such as renewables and gas-fired power stations.

Most people believe that we need to put more resources into public infrastructure but don't know how this can be achieved. The traditional mechanism for financing public infrastructure was through government debt borrowings supported by taxation. In market economies it was recognized that market failures exist. It was recognised that the private sector couldn't provide the entire economic and social infrastructure required. There were many reasons for this including the massive up-front costs associated with infrastructure, the advantages in some sectors of having infrastructure run by a public natural monopoly, and positive "externalities" associated with public infrastructure such as cleaner air, reduced travel times and fatalities, a highly educated and skilled workforce and a healthier popu-





lation. The latter are benefits that cannot usually be captured through private sector markets.

The benefits of government debt financing have been confirmed by recent studies into the best methods to finance infrastructure, which have highlighted advantages of public borrowings including low costs of borrowing and linking costs over time to the flow of benefits.

The dominance of neo-liberal economic policy and practices – characterised by low taxation, debt reduction and small government – has had disastrous consequences for public infrastructure. The neo-liberal perspective is that the private sector has the resources and expertise to invest in, own and manage our infrastructure. In extreme form, this entails a continuing winding back of public sector investment in infrastructure and reliance on the private sector to come up with unsolicited proposals to meet our infrastructure needs.

Over the past 15 years, Australian governments have sought to increase private sector participation in financing, managing and ownership of public infrastructure. This included privatisation of airlines, telecommunications, rail lines and energy infrastructure. Increasingly focus has shifted away from outright privatisation and to public private partnerships, which involve a sharing of risks, responsibilities and rewards between public and private sectors.

The mobilisation of national savings for public infrastructure through the use of superannuation funds (now around \$878 billion) presents an important opportunity to address the capital constraints on public infrastructure. Super funds are increasingly active in exploring infrastructure investment opportunities. The important point, however, is that in protecting their members' savings, the super funds are obliged to invest in those activities that maximise commercial rates of return over a long period of time.

This report seeks to reinvigorate the role of the public sector in the provision of public infrastructure. It argues that there needs to be a stronger commitment from the three tiers of governments to address our major infrastructure challenges. It examines recent national and overseas experiences with private financing. Although

the report confirms the advantages of public investment in infrastructure, it argues that there are a range of innovative financing techniques that could increase investment in infrastructure and the efficiency with which it is managed.

The report looks at why Australia has not been more innovative in financing public infrastructure and cites the following problems:

- The historic fiscal imbalance between local, state and federal governments, which has centralised most fundraising capacity in the Commonwealth.
- Legal impediments that limit the powers of state and local governments to raise funds.
- A less developed public capital market which has traditionally relied on the expanding tax base for budget funds.
- The dominance of neo-liberalism, which erroneously emphasises the benefits of small government and budget surpluses by both state and federal governments, regardless of the changing needs of the community.
- The tax system is biased against long-term investments in public infrastructure.

Some of the policy instruments that should be given consideration include:

- Government special bonds
- Dedicated infrastructure funds
- Statutory authorities
- Public interest corporations
- Intergovernmental leaseback arrangements
- Pooling of municipal debt

The report concludes with a number of recommendations to unions regarding how we can improve the financing, funding and management of our public infrastructure, which is critical to meet the demands of a competitive economy and a humane society.

# 1. Terms of Reference

*"All of the infrastructure deficiencies reduce productivity, drive up the cost of goods and services and inhibit peoples access to employment... well selected public infrastructure can play an important role in furthering economic growth".*  
*Edward Ragan, former Comptroller of the State of New York.*

The report is a follow-up to the 2003 report, *Paying for Private Profit - a review of the public private partnership model in the provision of community infrastructure and services*. The first report was prepared for the Rail, Tram and Bus Union, Australian Education Union, Australian Nursing Federation and Community and Public Sector Union-SPSF Group. It was concerned with a critique of public private partnerships (PPPs), and problems that have occurred with their implementation.

This report is concerned with an elaboration of different financing and funding mechanisms and positive solutions to our infrastructure crisis.

The four unions plus the Australian Manufacturing Workers Union requested Strategic Economics to "undertake a new research project about the infrastructure funding challenge in Australia and positive alternative roles for industry super funds and other means to provide for our infrastructure needs".

The unions believe that Australia is facing an infrastructure crisis as a result of long-term lack of commitment by Australian governments to invest sufficiently in new infrastructure, the maintenance of existing infrastructure and cutbacks in services provided by infrastructure. The problem has been compounded by costly, risky and inefficient experiments with public private partnerships.





## 2. Background

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Australia's infrastructure needs are large and growing. Over the past 20 years in particular there is a growing gap between the need for high quality rail, road, health, education, water and sewerage, waste management, energy and community infrastructure and the capacity and commitment of federal, state and local government to provide this infrastructure.

The critical economic, social and environmental imperative to provide, replace, maintain and build new infrastructure is becoming increasingly apparent. A commitment at the national level, where constitutionally the greatest capacity resides, has been lacking.

Infrastructure is defined as the foundations and resources that underpin the movement of ideas, data, energy, water, people and goods and services in an economy. Public infrastructure is normally defined as those infrastructure assets that are owned by the public sector. However, given the growth of new ways of funding and financing public infrastructure, including public private partnerships, ownership itself may be an insufficient condition to determine whether an infrastructure asset is public or not. In this report, public infrastructure is defined as those infrastructure assets that are generally costly, provide intergenerational benefits and provides public goods and/or services to the broader community. They include economic infrastructure such as railways, roads, electricity and gas, water, waste management and telecommunications; social infrastructure such as schools, hospitals, libraries and community facilities; and human capital infrastructure which includes the knowledge, skills and capabilities of people underpinned by investment in education, research, training and health.

There is a two dimensional challenge in public infrastructure funding. Firstly, after decades of denial, governments are now conceding that much of Australia's infrastructure was allowed to deteriorate through deferral of maintenance, especially over the past 20 years. Secondly, there is a challenge to finance future needs due to changing demographics, global competitive forces, increased capital intensity in many sectors such as health, education, transport and utilities, and increased community expectation for high quality services.

In the face of increasing needs, the response of governments has been to reduce expenditure and to rely more on public private partnerships to accelerate much needed infrastructure investment. However, there are many better alternatives.

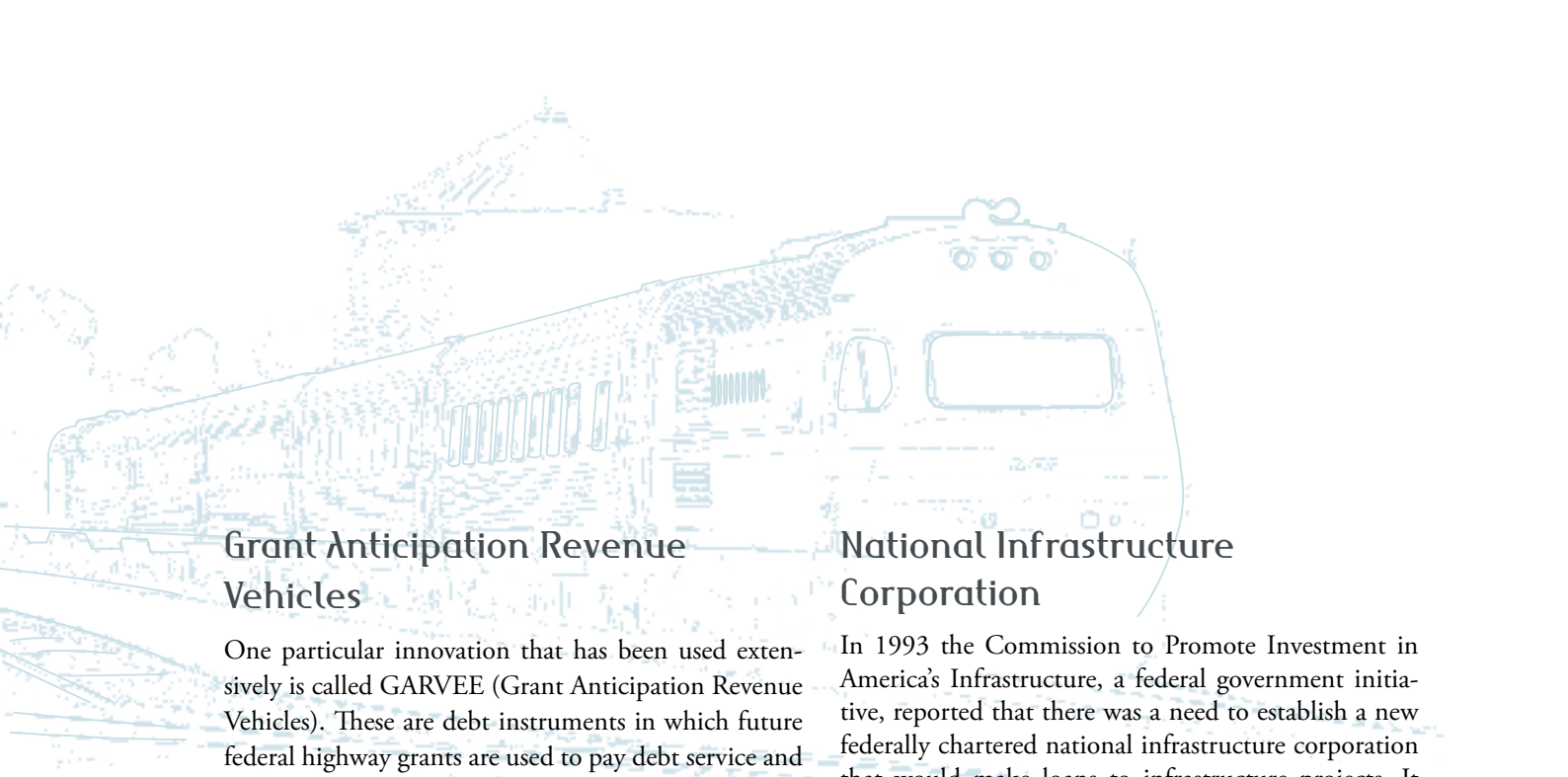
A major finding of any consideration of the three tiers of Australian governments' approach to infrastructure funding and financing is the lack of innovation and coordination. Grant funding remains the mainstay of funding, along with some joint venturing. By contrast, especially in North America, innovative techniques have been employed to extend, lever and increase resources going into public infrastructure.

In the USA, for example, the Federal Highway Administration launched a major new initiative in 1994 to identify barriers to highway infrastructure investment and to develop strategies to overcome them. Designated the TE – 045 the initiative invited the US states to identify new ideas in road infrastructure funding and financing. A number of innovative financing techniques were and continue to be employed. In 1995 the National Highway System Designation Act was enacted. In 1998 the Transportation Equity Act for the 21st Century (TEA – 21) confirmed this approach. Under this act the Federal Government can provide loans, loan guarantees and lines of credit to public and private sponsors of major surface transportation projects. The major outcomes of this approach have been to maximise the ability of the states and other project sponsors to leverage federal capital, spread the effects of such funding over a greater number of projects and to accelerate needed public works.

Various Federal funds management techniques such as:

- advance construction;
- tapered match and
- grant supported debt service

have been shown to progress projects that may have had to wait a considerable time to be built. In some instances, where a pure grants program had been put in place and a 20 year horizon put on completion these projects have now been built in 5 years.



## Grant Anticipation Revenue Vehicles

One particular innovation that has been used extensively is called GARVEE (Grant Anticipation Revenue Vehicles). These are debt instruments in which future federal highway grants are used to pay debt service and other costs.

Most states in the USA have state infrastructure bonds that are designed to provide low interest loans, loan guarantees and other credit enhancements.

Another alternative to PPP project funding - where the surpluses generated are passed onto the private investors and not reinvested in new public infrastructure - is the use of tolls and associated income as security to raise additional debt for new infrastructure. The Transport Infrastructure Credit Enhancement Program, established in 1997, provides grants to US states for projects that capitalise revenue stabilisation funds that would back a project's debt. They are not considered as guarantees but are used in the same way to reduce risk. However, unlike PPPs operating in Australia, the benefits of reducing risk are shared proportionately in reducing overall costs of projects and not as a subsidy for private investors.

## Grant Anticipation Notes

Another major innovation used in the US is called GAN, or Grant Anticipation Notes. This innovation allows local and state transit agencies to borrow against future federal aid funding. With GAN, agencies issue bonds with a pledge of federal aid assistance in the future. This innovation has allowed capital-intensive projects to be funded earlier compared to traditional grants funding arrangements. Specific provision is made under the Transportation Equity Act 21<sup>st</sup> Century for the purchase of buses, trains, ferries and support equipment as well as new rail systems and line extensions.

## National Infrastructure Corporation

In 1993 the Commission to Promote Investment in America's Infrastructure, a federal government initiative, reported that there was a need to establish a new federally chartered national infrastructure corporation that would make loans to infrastructure projects. It also recommended creating new investment mechanisms, including securities issued or guaranteed by the new corporation.

In a similar way to Fannie Mae (Federal National Mortgage Association) and Freddie Mac (Federal Home Mortgage Corporation), this government-sponsored enterprise would receive grants, raise funds in the market and most importantly develop the public sector expertise to assess proposals being put to it.

It was proposed by the Commission that two bodies be established – the National Infrastructure Corporation (NIC) and an Infrastructure Insurance Company (IIC). Essentially these two bodies would enable other tiers of government to more efficiently access the markets and bear the credit risks of municipal bonds.



# 3. The need for increased infrastructure investment

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How can it be that, at a time when we have never been as wealthy as a society, we have such a struggle paying for the infrastructure and their services that underpin our prosperity?

We are not just talking about individual infrastructure items, but the whole system seems to be dysfunctional.

Our public schools are starved of resources whilst more parents, at least those who can afford it, feel compelled to send their children to private schools. Confidence in our public hospitals is at an all time low. Waiting lists for elective surgery keep growing, ambulances circle hospitals with sick patients looking for emergency beds and health workers on the front line are exhausted and under-resourced. The public transport system has deteriorated to the point where it has little credibility, resulting in a downward spiral with more people forced to use private cars.

The rundown of local infrastructure is also striking. Councils have been constrained from borrowing and find it difficult to maintain local roads, parks and community centres. Despite soaring property prices and growing problems with housing affordability, public housing has been rundown almost to the point of no return. Many households are struggling because of declining housing affordability.

Almost 50 years ago the American economist John Kenneth Galbraith published *The Affluent Society*<sup>1</sup>, which referred to “private affluence, public squalor” to highlight the contrast between the abundance of private goods for people who can afford them, and the rundown of public goods and services that underpin the functioning of a healthy and prosperous society. Galbraith’s book, focused on the United States, argued that in order to be successful, the country needed to spend much more on public infrastructure including transport, health and education as well as social services and recreational resources. This was preferable to relying on the production of trivial consumption goods.

As we all know, successive US governments ignored Galbraith’s warnings about the affluent society and embarked on a development path driven by the excesses of consumerism and militarism. The outcome is a material rich but divided society characterised by

poor public infrastructure and services, inequality of opportunity and social fragmentation.

Conservative economists who champion the neo-liberal model of economic development argue that the dynamism of the American economy is the result of private sector initiative, small government and low taxes. There is no doubt that the unleashing of “animal spirits” through private sector capitalism can produce material benefits in certain circumstances and the evidence of US economy in expanding the production of consumption goods supports this. However, America’s economic growth has been sustained by state intervention particularly through substantial expenditure on a “war economy” and through large public sector budget deficits that stimulate economic activity, the latter through the ongoing tax cuts for wealthy households. Economic growth rates tell us nothing about the quality of life. If Galbraith’s advice had been heeded, the USA would have still been prosperous, but much more emphasis would have been given to the production of public goods and infrastructure.

Australia has been a star pupil in the adoption of the neo-liberal economic model borrowed from America. We have been able to sustain high rates of economic growth since the early 1980s with the major interruption of the ‘recession we had to have’ in 1990-01.

We are now paying a high price in terms of our own public squalor. National and state governments have sought to rely more on market-based solutions rather than good public policy and practice to address society’s challenges. Public borrowings have been reduced and eliminated. Public sector assets and instrumentalities have been privatised. Lower taxes have boosted private consumption. The long-term squeeze on the public sector has resulted in fewer resources available for maintenance of public assets and recurrent spending to support wages. Contracting out public services has been costly and inefficient.

1 John Kenneth Galbraith, *The Affluent Society*, New American Library, 1958.



The implementation of the neo-liberal economic policies has major implications for the provision, management and maintenance of infrastructure. Firstly, there has been a shift from public to private resourcing of economic activities. Governments are constrained from borrowing whereas private finance is readily available. Secondly, market based solutions are biased in favour of short-term returns to investors. Major infrastructure projects, where benefits may flow for decades but the cost are borne upfront, miss out. Thirdly, with greater emphasis on private financing, infrastructure projects that bring universal benefits are not favoured by the private sector, whereas projects that have a revenue stream associated with them are favoured. For example, there is a lot of interest in funding private motorways because motorists pay a toll, but little interest in funding public transport infrastructure, which brings benefits to pensioners, young people and low-income earners.

It is in relation to our infrastructure and the services associated with infrastructure that the costs of neo-liberal economics are most apparent. Australia needs to address the “private affluence, public squalor” imbalances in our society. But catch-up is only part of the problem. There are a number of factors driving demand for new infrastructure and their services. We also have a number of major challenges.

Firstly there is the challenge of globalisation. The growing inter-relationships between Australia and the global economy have resulted in rapid increases in the international movement of goods, people and information. This puts pressure on our ports, airports, land transport infrastructure and telecommunications. The number of aircraft movements through Sydney International Airport, for example, is increasing by around 8-10% per year, airfreight is growing at more than 11% per year; and the Commission of Inquiry into Port Botany is investigating increasing capacity from 1.2 million TEU (ie containers) to around 3 million TEU per year.

Secondly, demographic changes including the forecast doubling of the older Australians and the sea change shift of people to lifestyle regions is putting increased pressure on our health care system and regional infrastructure.

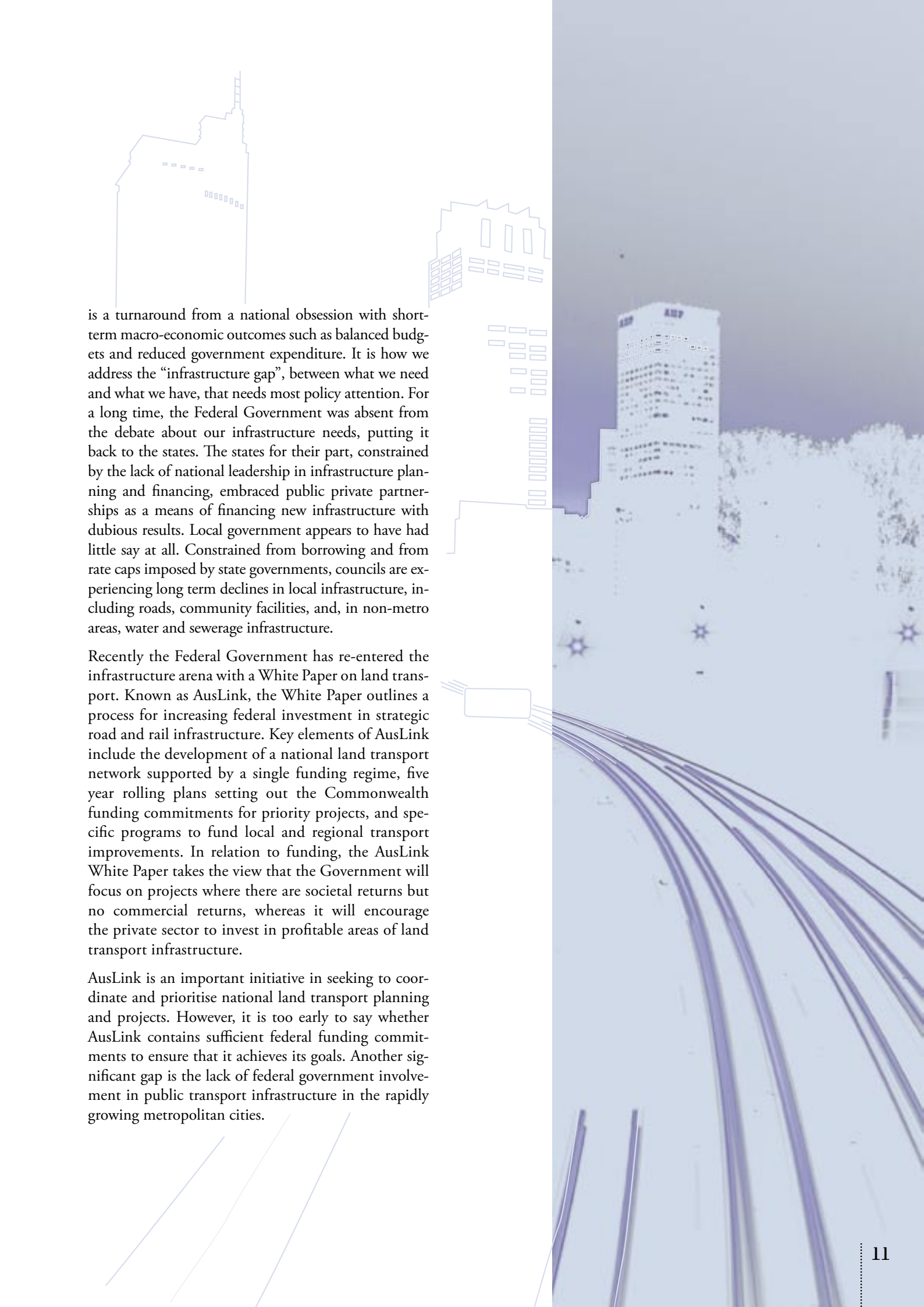
Thirdly, advanced economies are being transformed into knowledge-based economies, where the basis of wealth and job creation is driven by knowledge. **Successful economies, ranging from Ireland and Sweden to South Korea, have understood this transition and increased resources available for education and knowledge infrastructure, including schools, tertiary institutions and R&D infrastructure.**

Finally, the growing alarm about greenhouse gas emissions is driving many countries to transform ageing and environmentally harmful transport and energy infrastructure to create new infrastructure based on the principles of sustainable development. For example, German transport policy is driven by the need to reduce greenhouse gas emissions and a national commitment to sustainable development<sup>2</sup>. This has resulted in a major upgrading of rail infrastructure and the implementation of a weight distance tax on trucks, which creates the revenue to increase investment in sustainable transport infrastructure.

There is growing recognition by Australian governments at federal, state and local government level that we have to make significant investments in infrastructure to stimulate productivity and economic development. This

2 Association of Consulting Engineers Australia, AusLink – A National Land Transport Plan, ACEA 2003.





is a turnaround from a national obsession with short-term macro-economic outcomes such as balanced budgets and reduced government expenditure. It is how we address the “infrastructure gap”, between what we need and what we have, that needs most policy attention. For a long time, the Federal Government was absent from the debate about our infrastructure needs, putting it back to the states. The states for their part, constrained by the lack of national leadership in infrastructure planning and financing, embraced public private partnerships as a means of financing new infrastructure with dubious results. Local government appears to have had little say at all. Constrained from borrowing and from rate caps imposed by state governments, councils are experiencing long term declines in local infrastructure, including roads, community facilities, and, in non-metro areas, water and sewerage infrastructure.

Recently the Federal Government has re-entered the infrastructure arena with a White Paper on land transport. Known as AusLink, the White Paper outlines a process for increasing federal investment in strategic road and rail infrastructure. Key elements of AusLink include the development of a national land transport network supported by a single funding regime, five year rolling plans setting out the Commonwealth funding commitments for priority projects, and specific programs to fund local and regional transport improvements. In relation to funding, the AusLink White Paper takes the view that the Government will focus on projects where there are societal returns but no commercial returns, whereas it will encourage the private sector to invest in profitable areas of land transport infrastructure.

AusLink is an important initiative in seeking to coordinate and prioritise national land transport planning and projects. However, it is too early to say whether AusLink contains sufficient federal funding commitments to ensure that it achieves its goals. Another significant gap is the lack of federal government involvement in public transport infrastructure in the rapidly growing metropolitan cities.

## 4. Infrastructure development and economic development

It is broadly recognised that infrastructure plays a critical role in national development. The problem is the cost and who pays for it.

Economic infrastructure services account for around 10% of Gross Domestic Product, as well as around 5% of consumer spending. Infrastructure services provide major inputs into farms, industries and businesses and are critical determinants of global competitiveness, particularly rail, roads, airport and ports<sup>3</sup>.

Historic studies indicate the positive impact of infrastructure investment on productivity. Over time, a nation's infrastructure priorities may shift. In the case of Australia, one of our critical challenges is how to improve our knowledge infrastructure, which encompasses universities, TAFE colleges, schools, and R&D investments.

More often than not, public infrastructure investment leads private sector investment. If the economic infrastructure is not in place including roads, energy and rail, then private companies will not set up operations in the area. Similarly, people will not move to areas that lack education and health services and community facilities. Planning and resourcing is a government responsibility. Similarly, governments can create the catalyst for the regeneration of distressed communities. Canary Wharf, a major redevelopment project in the London Docklands, and often lauded as a success of private sector entrepreneurialism, is a good example.

The project was considered a failure until the UK Government and London Transport built the Docklands Light Railway and extended the Jubilee Line in the underground railway system. Another successful case study is the NoMa (North of Massachusetts Ave.) project in Washington DC, a previously distressed African-American community that is being transformed into a technology, media, arts and housing district. The project has levied private sector finance because of the strong commitment by the public sector to make substantial investments in the area including construction of a new metro station and public sector offices. The project also had strong support from the community, associated with community strategies to improve housing, amenities, schools and gain access to the growing jobs in the area<sup>4</sup>.

Running down infrastructure has both macro economic impacts – including slower economic and productivity

growth rates – and impacts on households, in terms of poorer services, ultimately lower living standards and certainly poorer quality of life. The evidence of the rundown of public infrastructure in Australia is concerning. The Institution of Engineers commissioned a report that indicates the shortfall in Australian public infrastructure is around \$150 billion, and concludes that it is naïve to believe that the private sector has the capacity and willingness to fund this shortfall. Much of our infrastructure is ageing and requires upgrading and replacing. The private sector is interested only in projects that are profitable. The NSW Auditor-General estimated that \$10 billion was needed now to replace rundown NSW Government infrastructure.

Engineers Australia regularly prepares a report card on the performance of Australia's infrastructure. A rating of C was defined as "adequate" with major changes required for the infrastructure to be fit for its current and anticipated purpose. A rating of D suggests that the infrastructure is in a disturbing state and that critical changes are required for infrastructure to be fit for its current and anticipated purpose. In its 2001 Australian Infrastructure Report Card, the organisation gave ratings of D- for rail, D- for irrigation, D for stormwater, D for roads, C- for wastewater and C for potable water.

In its 2003 Report Card for NSW, Engineers Australia concluded that the state's rail infrastructure and stormwater infrastructure were in a poor state. The report found that funding and capacity of the rail network were in a poor state and the provision of public transport infrastructure to high growth areas was unresolved. The report found NSW stormwater infrastructure was old and unable to meet desirable water quality and pollution standards.

The massive infrastructure backlog is highlighted in a recent report from the Council for Economic Development of Australia. The report estimates the current backlog in "hard" infrastructure (ie roads, rail, ports etc) investment is around \$25 billion, and Australian GDP could be boosted by 0.8% per year, or \$300 for every Australian, if the investment backlog could be overcome<sup>5</sup>.

3 Productivity Commission, Review of National Access Regime, Report No 17, Canberra 2001.

4 Marc Weiss, Community Development in OECD, Private Finance and Economic Development, OECD, Paris, 2003.

5 CEDA, Infrastructure: Getting on with the job, Growth Report Number 54, CEDA, April 2005



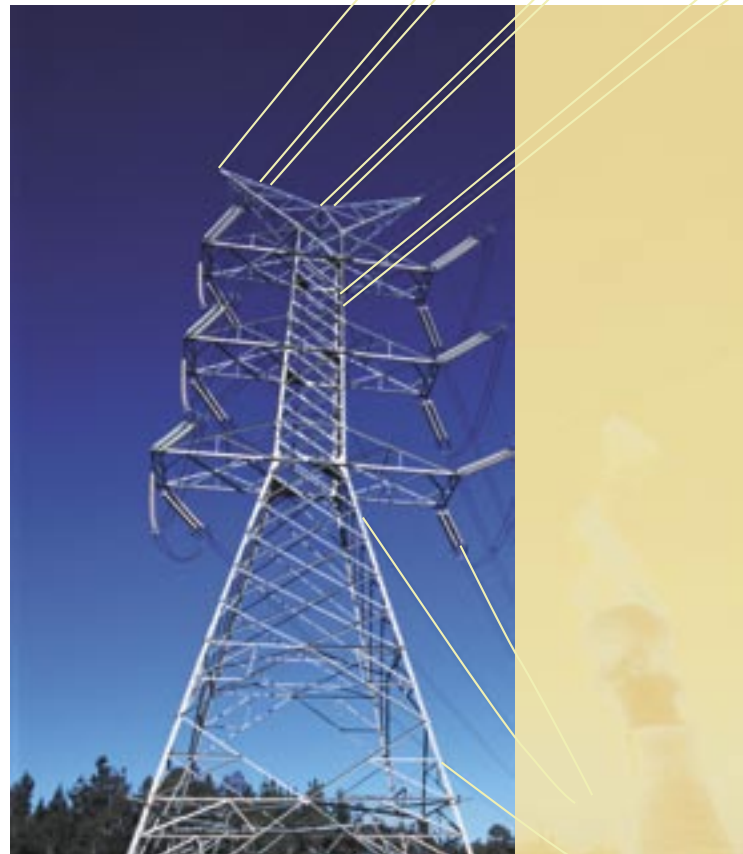
## Transport

Australia's transport infrastructure has been rundown by federal and state governments over a long period of time. In the 1960s around 3% of Gross Domestic Product was invested in transport infrastructure. According to the CEO of the Australian Council for Infrastructure Development Dennis O'Neill, "In the 20 years to 1993, expenditure fell by 50% in terms of its share of GDP, reaching a low point of 1.4% in 2001. The costs of building and maintaining our land transport system are increasing. Much of the road system is ageing, particularly at local government level. The backlog in rail maintenance is increasing. In NSW, for example, the NSW Auditor-General warned in 2004 that the backlog in maintenance expenditure has ballooned to \$680 million<sup>6</sup>.



## Power

Our energy infrastructure is outdated and not capable of making even a modest contribution to greenhouse gas reductions. A number of states have experienced blackouts and the system is operating at or near to capacity. NSW has major decisions to make about new electricity supply within the next three years. A NSW Government report estimated that between 1,500 and 3,000 megawatts of new generation capacity need to be built over the decade to 2010. According to a study of Queensland's electricity distribution and service delivery, "the current state of the networks operated by Ergon Energy and ENERGEX dictates that they require greater levels of expenditure on capital and maintenance than they have been accorded in recent years". There is reduced spare capacity in the system and hence a lower ability to cope with failures in the distribution network. Planning for additional capacity is urgently required. A reserve capacity shortfall is forecast before the end of the decade. Demand is growing at close to 6% per year in South East Queensland, particularly due to growth in demand for air conditioning, and substantial expansion in the capability of the transmission network is required<sup>7</sup>.



<sup>6</sup> Sydney Morning Herald, 17 November 2004

<sup>7</sup> Engineers Australia, Queensland Infrastructure Report Card, 2004

## Water

Australia's water crisis is not only about poor investment in water infrastructure, it is also about wasting the scarce resource that we have through not recycling water and efficiently disposing sewerage. Major infrastructure problems are identified in supply infrastructure and management. Dams in Melbourne are about 56% full; in Sydney 43%; in Brisbane 53%; and in Perth, 37%. Water infrastructure is highly capital intensive, comprising dams and reservoirs, pipes, processing plants and pumping stations. Substantial investment is required to convert irrigation channels to pipelines to prevent evaporation and leaching.

## Housing

Our society has been moving away from public housing as a means of providing affordable housing for low-income earners. Our ageing public housing stock is in a poor state. According to the NSW Auditor-General, the state has a \$650 million backlog of maintenance and repairs for 139,000 houses.

## Local Government

Local government is the provider of much of our local infrastructure including local roads, stormwater drains, parks and community facilities. Restrictions on government borrowings through the Loan Council and rate capping by state governments have dramatically reduced resources available to councils to maintain and invest in new assets. A study for the NSW Government in 1999 estimated that the cost of upgrading infrastructure to a satisfactory condition and the cost of maintaining in a satisfactory condition thereafter was around \$6 billion. The Australian Local Government Association has highlighted the crisis in local infrastructure. ALGA President Mike Montgomery has called for access to a fair share of national taxation revenue, a Roads to Recovery-style program for non-road infrastructure and a whole-of-government approach to infrastructure priority setting and funding were needed to help avert the crisis facing local government's ageing asset base<sup>8</sup>. Mike Montgomery cites a South Australian report, which suggests that council infrastructure maintenance in the state was being under-funded by \$105 million – or almost 20% of revenue.

## Health

Our public health system has been squeezed by increasing demand due to ageing of the population and capital-intensive nature of much of our health care, and an unwillingness of governments to invest more in hospitals and to provide funding for ongoing operations, resulting in longer waiting lists and in some cases, hospital closures.

In summary, our infrastructure is not keeping pace with our needs. If governments are loathe to borrow or to raise taxes to maintain and rebuild our infrastructure, then the cost for future generations will be high. As an alternative to using debt to fund infrastructure, a whole range of risky methods have been used including privatisation ("selling the family silver"), public private partnerships, taxes, user charges and developer contributions. In a report for the Property Council of Australia, the Allen Consulting Group examined and



8 Councillor Mike Montgomery, Regional Co-operation and Development Forum, opening address, November 2004

modelled a number of alternative methods to provide infrastructure. They concluded that the case for government debt is strong, particularly when projects are rigorously evaluated. This is because governments can borrow funds relatively cheaply and match the costs of providing infrastructure with their benefits over time. They also found that PPPs provide benefits, although the cost of borrowing is greater than for the government borrowing model.

Our infrastructure needs are not being met for a number of reasons:

- Governments are not spending enough on infrastructure. Our tax rates are low by OECD standards and Australian governments have reduced debt by two thirds over the past decade and seek to keep budgets in surplus.
- Fiscal imbalance between national and state governments is an impediment to infrastructure investment. The Commonwealth collects income and company taxes but the states have most of the responsibility for investing and maintaining infrastructure.
- Neo-liberal economics has resulted in low taxes and a reduction in the use of debt to fund infrastructure.
- Governments are primarily concerned with short-term outcomes and the tax system is biased against long-term investment.
- The tax system favours investment in property and shares rather than long-term infrastructure projects.
- The rundown of public sector finance skills compounds the difficulties for the public sector in managing large infrastructure projects.
- The economic gains from public private partnerships have proved elusive, with a number of PPPs intensifying costs and risks to government.
- Insufficient reserves have been put aside to maintain infrastructure assets.

Globalisation puts pressure on economic infrastructure, particularly those infrastructure assets that underpin trade and tourism. Increasing trade dependence increases the demand for airports, ports, road and rail, and for improved telecommunications including broadband.



Environmental outcomes are being poorly met by the existing infrastructure systems particularly in energy, water and transport sectors. If we are to meet even modest greenhouse gas targets, reduce car dependence and improve the use of our scarce water resources, then a completely new approach to infrastructure planning and provision is required.

As well as meeting historic shortfalls, there is an equally important challenge in positioning Australia for the future. The global economy has never been more dynamic. Opportunities are less fixed, more competitive and globally influenced than ever before. It is no longer possible to remain competitive by virtue of place, historical advantage, or relationship.

Any discussion about infrastructure investment must include the critical need to invest in the social infrastructure. The investment in the 'hard' infrastructure without a complementary investment in 'soft' infrastructure may in the short term make the Australian economy more efficient. However if it is not supported by investment into such areas as communications, technology, training, research, education and innovation — the knowledge economy — such competitive advantage will be short term.

Many other countries have recognised the need to invest in this way. Singapore, a small trading economy in the 1960s, embarked upon a range of education, business, and soft infrastructure investments that saw it emerge as the wealthiest industrial country in Asia in a matter of 20 years. We need to learn from other countries' experience in dealing with ways of increasing infrastructure investment.

## 5. Overseas experiences with private financing of infrastructure

The rise of economic neo-liberalism – associated with tax reduction, debt elimination and “smaller” government – has resulted in a decline in the role of government in financing, managing and operating infrastructure and greater emphasis on private sector participation through privatisation and public private partnerships – with the latter involving a sharing of risks and rewards between public and private sectors. Governments that have embraced PPPs seek to explain their roles in terms of facilitation and regulation of services provided by the private sector.

The United Kingdom under Conservative and New Labour Governments has led the way with private financing of infrastructure. The Conservatives privatised the British rail network, intensifying problems of fragmentation and under-funding of this critical public transport infrastructure. New Labour committed itself to a 21<sup>st</sup> century “rail renaissance” but tried to find solutions with the private sector partners who were running the discredited privatised system. According to a recent report on British railways<sup>9</sup>, the experience of privatisation has been one of “deteriorating performance, compromised safety, escalating costs to the taxpayer, increased red tape and bureaucracy, and major social and economic disruption caused by key accidents and performance failures”. Further, the private firms running the rail industry are receiving public subsidies three times larger than British Rail. Fragmentation of the industry had resulted in escalating costs, around three to five times higher than before privatisation.

New Labour in the UK has been the trendsetter in public private partnerships. PPPs have been put forward as a way to rejuvenate public services with earlier experiences in prisons and major transport infrastructure being duplicated in health and education. According to social commentator George Monbiot<sup>10</sup> “The reality is that PFI (ie. privately financed initiative) is a scam...it offers neither effective public provision nor business efficiencies. Far from introducing market discipline, it

has become an official license to fleece the taxpayer. Far from reducing public sector borrowing PFI, as the Accounting Standards Board has noted, simply an “off-balance sheet fiddle”.

It is in the areas of education and health that New Labour’s programs have been most controversial. In 2003, W S Atkins pulled out of a major contract running Southwark’s education services. The company pulled out two years into a five-year contract citing the “increasingly challenging” financial arrangements<sup>11</sup>. The company made its name in major engineering projects, and didn’t have a background in running schools. With profit margins squeezed by difficulties in other sectors and school costs escalating, the company pulled out of the project. A Scottish community Falkirk is counting the cost of its experiment with PPPs. The Council is required to pay private companies \$3,360 million over the next 25 years for five schools it won’t own at the end of this period<sup>12</sup>.

In health, private financing, known as private finance initiatives (PFIs) is the preferred means to design, construct and operate UK health facilities. Private sector consortiums establish companies to provide infrastructure and services over a long period of time. The benefits of this approach, according to New Labour, include sound macroeconomic outcomes ie. budget surpluses; and “value for money” by using the private sector as a spur for innovation in the health sector. Private Finance Initiatives have shifted debts from central government to national health trusts. More importantly, the PFIs have not resulted in improvements in services, with trusts having to sell assets, reduce staff and cut bed capacity to pay for the high costs of PFIs<sup>13</sup>.

The support of public funding of services in the UK has some interesting allies. In a survey of 200 accountants from the Association of Chartered Certified Accountants, around 57% believed that it was cheaper to build new schools and hospitals through public funding and only 1% thought that PFIs provided value for money<sup>14</sup>. In a story reminiscent of Yes Minister, a PFI hospital was so short of hospital beds 10 months after opening that it

9 Catalyst, “Renaissance delayed? New Labour and the Railways”, Catalyst London, 2004.

10 As quoted by Kenneth Davidson, “The PPP Mafia”, the Evatt Foundation, 27 July 2002.

11 Phil Revell, Another UK PPP falls in a heap”, Evatt Foundation, 2 May 2003.

12 Robbie Dinwoodie, The Herald, 5 June 2002

13 Allyson M Pollock, Jean Shaoul and Neil Vickers, Private finance and “value for money” in Britain’s public hospitals, BMJ, 2002.



was unable to meet its waiting list targets and the number of patients waiting for surgery had risen dramatically.

A series of problems has beset PPPs operating in the education system. For example, a major UK company, Jarvis, is facing a financial crisis<sup>15</sup>. The company is involved in 30 PFI projects, including 24 school schemes, three hospitals and five accommodation projects. Work has stopped for almost a year on many projects.

In Canada, the auditor found that the project cost for the Evergreen Park School in New Brunswick was almost \$1(Can) million more than if the school had been built publicly. In Halifax, Newfoundland, a consortium and the school board ended up in a costly legal dispute over who should pay for the cost of fixing the water system after arsenic was found in the water<sup>16</sup>.

A recent report for the Ontario Health Coalition has documented 100 case studies of PPPs that have experienced major problems<sup>17</sup>. It states:

“While 3P proponents claim that projects come in ‘on time’ and ‘in budget’, the evidence does not bear out these assertions. Many projects are late and serious cost overruns are frequent. The bifurcation of management or ownership of public services entailed in these deals leads to serious conflicts of interest between corporations that seek to maximise profits and public services that seek to meet community needs and contain budgets, leading to costly legal disputes and quality issues. Moreover, in the negotiation of 3P deals, the public sector has not been able to achieve the 3P proponents’ claims of value for money or risk transfer”.

Further, “3Ps have also increased inequality, boosting salaries for executives and remuneration for expensive consultants and lawyers while decreasing pay and working conditions and reducing access to services. Democratic control has been sacrificed to commercial secrecy and private for-profit management. High costs have led to service cuts and diminished access. Long term commitment of large revenue streams to lease deals has an unmeasured impact on government flexibility and public policy decision making.”



14 “PFI more expensive than public funding, The Guardian 11 October 2002

15 “Treasury papers show fear over Jarvis”, The Guardian, 3 February 2005.

16 Natalie Mehra – Ontario Health Coalition, Flawed Failed Abandoned – 100 P3s – Canadian and International Experience, March 2005.

17 Ibid.

## 6. Australian experiences with public private partnerships

Public private partnerships became fashionable in Australia over the past five years, particularly with state governments. The Australian PPP market is approaching \$20 billion, with projects ranging from motorways, rail lines and stock, water and waste facilities, prisons, educational institutions and hospitals<sup>18</sup>. They have become an attractive option to address the funding shortfall in public infrastructure provision. The funding shortfall is due to the unwillingness of governments of all persuasions to increase taxes and / or borrow to finance infrastructure.

Governments were able to increase revenues from the mid 1980s by selling government assets, but from the mid 1990s this source of revenue, with the important exception of Telstra, began to slow. Governments look to the private sector to finance much of the new infrastructure, without privatisation. As opposed to privatisation, where public assets are transferred to the private sector, different aspects of a project including financing, ownership and management are the subject of negotiations in PPPs. PPPs involve more substantive agreements about risk and delineation of responsibility between the public and private sector. PPPs are not a new concept. They can be traced to the funding of tollways in North America where private consortia were established to bid for the construction, financing and ownership of tollways. They were popularised by the Blair Government in the UK in the late 1990s and embraced by Australian state governments.

Neo-liberalism drove the creation of PPPs in Australia. Instead of paying for infrastructure up-front, the typical PPPs involves a contractual relationship where a special purpose vehicle is created and the government leases the assets from the private sector for a specified period of time, normally 20-30 years, when the asset is transferred back to the public sector. There are many different types of PPPs. The traditional arrangement was design and construct – where government contracted the private sector to design and construct an infrastructure asset for a specified amount and guaranteed level of service. With design and construct projects, the private sector is responsible for construction risk, and was required to construct to a certain standard. Build Own Operate and Transfer (BOOT) projects are another

type of PPP. Many capital constrained developing countries made use of these schemes from the 1980s, whereby the private sector might finance the construction of a power station, for example, operate and maintain it for a period of 30 years, charge users based on a formula taking into account capital plus electricity consumption, and transfer back to the government at the end of the period.

State governments have taken a leadership role in developing PPP policies and projects. The role of the states has been documented by the Australian Council for Infrastructure Development<sup>19</sup>.

Victoria, which led the way with state privatisations of electricity and transport infrastructure under the Kennett Government, has continued the push for private sector involvement with PPPs under the Bracks Labor Government. Major projects include Wodonga Waste Treatment Plant, Victorian County Court, Mobile Data Network, Docklands Film and Television Studio complex, Enviro Altona Project, Echuca / Rochester Wastewater Treatment Plant Project, Spencer Street Station Redevelopment and Berwick Community Hospital. The Victorian Government recently commissioned consultant Peter Fitzgerald to review the state's PPP policy<sup>20</sup>. The report favourably assessed the state's experiences with PPPs, and suggested that PPPs should comprise 10% of Victoria's infrastructure investment, an increase from the existing 7%.

The NSW Government released guidelines for privately financed projects in 2001 and nominated a number of projects suitable to be financed as PPPs, including motorways, railway rolling stock, the Mater Hospital Newcastle, Forensic Hospital and Newcastle Polyclinic. The Government created the NSW Infrastructure Council as a mechanism to strengthen industry-government collaboration, but ironically the Council has not met since early 2003. Following the debacle with the Oasis project in Liverpool, South-West Sydney, where council mismanagement cost ratepayers tens of millions of dollars, the NSW Government amended the Local Government Act to provide a regulatory framework for council participation in PPPs.

18 National PPP Forum, Melbourne, November 2004

19 AusCID, Public Private Partnerships – a brief summary, undated.

20 Peter Fitzgerald, Review of Partnerships Victoria Provided Infrastructure, Melbourne, 2004.



The Queensland Government released its Public Private Partnership project in late 2001. The document specifies that projects greater than \$30 million will be considered for funding by a PPP instrument. The Government has committed to or listed a number of major projects including the redevelopment of Southbank TAFE, the \$800 million Gateway Bridge duplication, Townsville Industrial Recycling and the \$200 million Petrie to Kippa-Ring railway north of Brisbane.

Western Australia released its Partnerships for Growth policy in 2002. The Peel Hospital and Joondalup Health Campus were funded by PPPs.

The South Australian Government released Partnerships SA in 2002. Major projects include upgrading the Glenelg Transport Corridor, procurement of new trams and upgrading the Barossa Hospital and a new women's prison. Tasmania has a private investment in infrastructure policy, released in 2000. Privately financed projects include North West (Burnie) General Hospital and Mersey Community Hospital.

In practice, as with much of the hype associated with neo-liberal economic principles, the benefits of public private partnerships have been exaggerated. Wildly optimistic forecasts by questionable economic models are dramatically scaled down when it comes to project construction and operation.

The Doctors Reform Society cites failures of PPPs at Port Macquarie Base Hospital, where the NSW government has recently paid the private partners to buy them out, as well as failures in Victoria and South Australia, as evidence that PPPs are disastrous for patients. Ultimately the government must pay. If patient care becomes too expensive, the government must bail out private sector operators and the cost savings evaporate<sup>21</sup>.

The contract between the NSW Government and Mayne Hospital to construct and operate Port Macquarie Base Hospital was a very expensive failure for taxpayers, health workers and patients. The project involved the NSW Government being contracted to pay \$144 million for a hospital that cost \$52 million to

construct, with land being handed over to the private sector. A distinguishing feature of the PPP contract was that there was no arrangement to hand the hospital back to the government at the end of the 20-year period<sup>22</sup>. The Government was required to pay an annual service charge, but could not stipulate where the funds were spent such as undertaking more hip, knee and joint replacements. The hospital management overspent the budget allocation and threatened to cease undertaking elective surgery. Hospital workers were also penalised, with workers under the private award not receiving the same entitlements as their workmates working under public sector awards. The ongoing dispute between government, health workers and community on the one hand, and the hospital management on the other hand, was only resolved when the government bought the hospital back from the Mayne Group<sup>23</sup>.

Engineering firm Leightons has lost around \$50 million on the Spencer St redevelopment project, primarily due to construction difficulties whilst rail services are running<sup>24</sup>. The financial difficulties with Brisbane's Airtrain, the city-airport link, were due to low patronage. It only stayed afloat because of major re-financing of the project in April 2005. The NSW Government had a similar terrible experience with the city-airport rail link, where the private consortium went bankrupt within 6 months because of low patronage. The project has been propped up by the NSW Government ever since whilst the parties battle it out in the court.

A recent example from Victoria highlights the problems when infrastructure has to be renegotiated<sup>25</sup>. The Victorian Government reached agreement with Citylink operator, Transurban, for the company to make a smaller upfront payment of \$150 million to replace payments due over the longer term for the upgrading of the Tullamarine-Calder freeway interchange. The Government had wanted \$200 million and the company proposed \$150 million. The company position was upheld.

21 Allen L., "Public private partnerships disastrous", Australian Financial Review, 7 September 2004.

22 NSW Legislative Assembly Hansard, 19 February 2004.

23 ANF Industrial News, The Lamp, February 2005

24 L Allen, "Partnership deals still on the boil", Australian Financial Review, 7 September 2004.

25 John Quiggin. PPPs and Renegotiation, <http://johnquiggin.com/index.php/archives/category/economics-general/>

# 7. Why is there a lack of innovation in Australia in relation to infrastructure funding and financing?

Australian governments are stuck in a rut when it comes to funding and financing our national infrastructure requirements.

The reliance on simplistic slogans like zero debt and budget surpluses leads to policy confusion and inefficiency. It also leads to simplistic solutions such as eulogising about the benefits of private sector investment through PPPs.

Although the unions believe that the private sector has an important role to play, the reality is that it is not possible or appropriate to run infrastructure services on a commercial basis.

When considering why there is less innovation and less supply of investment capital available in Australia to that in other comparable countries, five issues need to be considered:

- (a) The historic financial imbalance between local, state and federal governments, which has centralised most fundraising capacity in the Commonwealth.
- (b) Legal impediments that limit the powers of state and local governments to raise funds.
- (c) A less developed public capital market which has traditionally relied on the expanding tax base for budget funds.
- (d) The dominance of neo-liberalism, which erroneously emphasises the benefits of small government and budget surpluses by both state and federal governments, regardless of the changing needs of the community.
- (e) The tax system is biased against long-term investments in public infrastructure.

## Financial imbalance

The Australian system of income generation for government purposes grew out of a set of unique historic experiences. The Commonwealth gained income tax powers at a time of crisis during the Second World War. As a result of this crisis the Commonwealth emerged as the principal fundraiser. The states became dependent through block grant allocations made by the Commonwealth Grants Commission, and increasingly, through specific program funding such as the Commonwealth State Housing Agreement, and the Medicare Agreement for hospital funding.

Local Government retained the power to set rate income but increasingly, local government has been required by state governments to cap rates at a pre-determined rate, as well as being constrained by local community resistance to rate increases.

Overlaying these instrumental constraints has been a political process of “all care no responsibility.” As the recent debate between State and Federal governments testifies, for example, when health services provided by the states decline, the states blame the Commonwealth for lack of funding. The Commonwealth’s response is that it is a state responsibility. Ultimately, the fiscal imbalance is maintained and services decline.

In addition to fiscal imbalance occurring between the three tiers of government, we have the implementation of budget cutting programs at precisely the time new infrastructure investment is required. Rather than building reserves in good times governments have sought to reduce taxation. Rather than increasing capital and recurrent spending to manage economic cycles, since the 1980s governments have preferred to continually reduce spending. This conservative approach to funding has contributed substantially to the current challenge facing governments and is adding to the infrastructure deficit.



## Legal barriers

Underpinning any attempt for financial innovation are significant constitutional and legal barriers to state and local governments. These range from the impact of the Income Tax Act to state government limitations on local government borrowings under local government legislation. Beyond the government sector, significant barriers limit the capacity of private sector investments to invest in anything but a prescribed way. A significant example of this has been the limitation on super-annuation funds to take into account anything but the rate of return on investments.

## Underdeveloped capital markets

In part because of a historically growing tax base, government has not felt pressured to look at alternative financing strategies for infrastructure. With notable exceptions Australia's capital raising markets were, until the 1980s, small, relatively unsophisticated and dependent on international expertise and capital. All of Australia's past major infrastructure projects were financed with overseas capital. Whilst this was necessary due to the lack of depth in the Australian capital markets, one consequence was the lack of development of domestic expertise and confident innovation.

With the introduction of foreign banks in the 1980s this changed and spawned some notable domestic players in the capital markets. However to date little of this innovation has impacted public policy. In large part this was the result of the collapse and closure of a number of state financial institutions in the 1980s. The legacy of the Victorian Economic Development Corporation and the State Bank of South Australia, for example, was the withdrawal of government from investment and development corporations.

Rather than learn the lessons from these experiences of failure, mirrored in the private sector at the time through such collapses as Pyramid Building Society, Bond Corporation, Tristate etc, the political view is to be negative about innovative public sector involvement. Meanwhile other countries have developed sophisticated tools for increasing public sector involvement in infrastructure provision and management.

## Conservative ideology

The dominant ideology at both Commonwealth and state treasury level has been the desire to minimise debt. This short-term approach to financing has become the established dogma within governments of all persuasions.

The reasons for this can be summarised as follows:

- (a) A political imperative that believes the public judges governments on an annual basis according to the size of the debt it is carrying. This may have more to do with the incapacity of our political leaders to project a long-term vision for the country than any real concern by the public with such arrangements.
- (b) Concern that their credit rating may suffer if debt liabilities are increased. This is a particularly curious concern as credit ratings are only relevant when governments seek to borrow from the market. Treasuries are using credit ratings as a surrogate index of financial management health. Credit ratings have little to do with financial management capacity. Debt, in itself, is not a problem. It is rather a question of whether such debt is used productively or unproductively. Of relevance to this debate are the consistent findings of public surveys that indicate a willingness of the majority of Australians to pay more tax if the level of services is improved. The low tax ideologues are clearly in the minority.



## Tax Issues

Until recently the tax system, through the provisions of leasing section 51AD of the Income Tax Assessment Act 1977 and Division 16D of the Income Tax Assessment Act 1936, prohibited the use of certain tax deductions in relation to infrastructure assets. The Federal Government has recently amended section 51AD and this may encourage increased private sector investment in major infrastructure projects.

The introduction of negative gearing tax breaks into the Australian economy by the federal government was intended to increase the level of private investment in the private rental market. Whilst evidence of the effectiveness of such a policy intervention into the market is difficult to find it has grown alongside an inflated housing market into one of the most significant tax driven investment strategies subsidised by the federal government. Negative gearing enables borrowers to offset investment costs including interest payments against wages. The annual cost of this initiative in terms of revenue foregone has been estimated in the last budget to be around \$15 billion.

Whilst it is unclear whether such a policy has succeeded in its principle goal, it does raise the question as to whether tax incentives may be better employed in encouraging more productive investment such as infrastructure. With the exception of the use of depreciation allowances on capital equipment and the utilisation of the tax provisions of the pooled development funds program, little has been initiated at a federal level to create a similar tax advantage for infrastructure investment. At a time when there is a proven case for greater levels of public investment in productive investment as against private consumption, the case for considering at least similar tax incentives to negative gearing is compelling.

Allied to this there is a need to remove income tax penalties for private infrastructure investment under the Income Tax Act, which effectively discourages investment in infrastructure.

The Federal Infrastructure Borrowing Tax Offset Scheme allows financiers to apply for a tax rebate on interest received from infrastructure providers in return for the infrastructure providers forgoing a tax deduction on the interest.

This benefits infrastructure providers because financiers are able to offer lower rates of interest earlier than that available from income tax deductions.

However since 1997 only \$2.1 billion dollars of projects have been deemed eligible under this program.

There is a clear need for a comprehensive review of the current tax regime so as to affect greater levels of investment into key infrastructure investments.



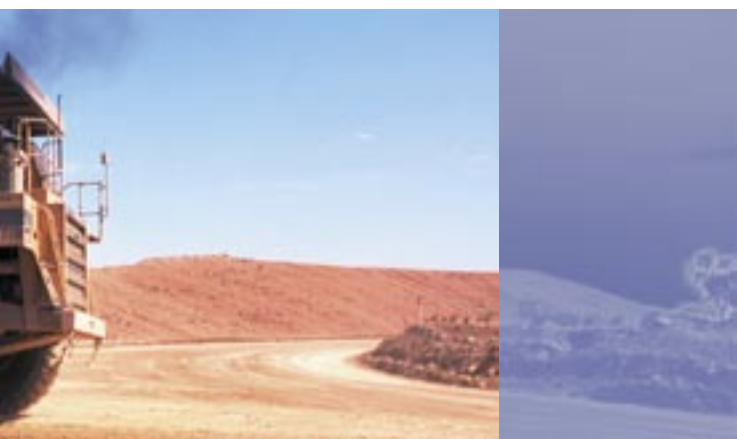


## Prioritising National Infrastructure Spending

Conventional needs studies look indiscriminately at the entire infrastructure system. An example of this is the requirement to bring all bridges up to a specified engineering standard. Whilst this may be positive from a health and safety point of view it does not discriminate between those improvements that will best contribute to the future economic wellbeing of the nation.

Australia can no longer afford indiscriminate infrastructure investment driven by merely profit driven opportunities or/and purely political considerations. The development of a national infrastructure priority list would enable the facilitation of realistic priorities that could be then examined for funding.

Currently no single government agency can articulate national, state or local priorities for infrastructure investment. In effect we have hundreds of priority lists at various levels of investment readiness, of which few are investment ready. There is a compelling case for both constructing such a priority list and exposing such projects to the best financial analysis as a way of optimising the net public benefit of such investment.



## The Issue of Government Debt

Historically, Australian governments at all three tiers have over the last twenty years aimed to retire all debt and wherever possible produce annual cash surpluses. The reasons for this have been discussed briefly elsewhere in this report.

Squeezed between this imperative and increased demand for services and investment government, particularly at the state level, has utilised a range of off budget transactions, transfers and strategies such as Public Private Partnerships. However many of these approaches have revealed themselves to be expensive, unfair and inefficient. More recently the International Monetary Fund has concluded that the capitalised value of future payments to PPP operators should be counted as part of government debt<sup>26</sup>. To quote:

“One criticism of UK accounting and reporting practice is that the future service payments under Private Finance Initiative contracts amount to an explicit off balance sheet liability totalling 100 billion pounds sterling which has significant implications for future borrowing or taxes. It has been suggested by some financial market observers that these liabilities should be disclosed as such, rather than as a stream of future payments.”

Whilst strategies for repositioning capital spending to off budget reporting from an accounting point of view appears politically attractive, it is unlikely that such strategies will remain unreported at government level in the future. The International Accounting Standards Board has already indicated a revision of standards that will see greater transparency in such government accounting reports.

All studies, including the most recent Allen Consulting Report into funding urban public infrastructure, have indicated that public debt raising is the most efficient means of raising funds.

26 International Monetary Fund, 'Public Private Partnerships,' Fiscal Affairs Department, March 2004.

Australia's net debt position is remarkably different from other comparable countries. In 2001-02 Australia's debt as a proportion of Gross Domestic Product had fallen to 6% compared to an OECD average of 40%. Government share of this debt are estimated at less than 4.6%, making Australia one of if not the lowest debt holding country in the world. Whilst admirable from a fiscal point of view, it has been at the cost of ongoing strategic investment into public infrastructure. Australia's extremely conservative approach to debt is perhaps best illustrated by comparing the USA at 60% of GDP, UK at 30% of GDP and France at 40% of GDP.

Debt in itself is not a problem if it is invested into productive assets. Direct and indirect returns as measured by greater economic efficiency (cost of goods and services) and effectiveness (strategic positioning in the longer term) must be the test for public infrastructure investment.

The Property Council of Australia / Allen Consulting report amplified the need to reconsider the use of debt in funding infrastructure. To quote:

"Reluctance to use the medium term fiscal policy flexibility that governments have earned may prove to be very expensive over time. There is increasing evidence that we are taking more risk to wellbeing in terms of the safety of economic prosperity as well as personal safety of people in the community because of under investment in infrastructure".

A contrary view often taken by Federal and State treasury officials is that increased borrowings will impact upon the credit ratings provided by credit rating agencies. Infrastructure planning and provision in all jurisdictions takes place within the confines of debt reduction. For example the NSW government through the General Governments Debt Elimination Act 1995 specifies:

- A timetable for eliminating all debt by 2020
- Maintaining net government worth from year to year
- Restraining government spending and taxation to strengthen NSW competitiveness and attract business investment.

Whilst these objectives are fiscally responsible they are not the basis for good economic development.

Currently all Australian governments have very high credit ratings. However there is no direct evidence that increased borrowings on productive infrastructure investment would have adverse impacts on the cost of funds. The question that needs to be answered is not whether there would be an increase in the cost of funds but whether such cost of funds overwhelms net benefits in any cost benefit analysis. For example the NSW Treasury estimated in 1997 that a reduction from 'AAA' rating to an 'AA' rating could contribute up to \$30 million per year in debt charges on their total borrowing program for that year. Such additional charges need to be compared in terms of the economic, social and environmental costs that such a lack of investment could cause the community. The efficiency dividends would need to be greater than the costs and if so, the investment should proceed on that basis and not purely on the principle of 'no debt'.





## Superannuation Funds and Infrastructure Investment

A key characteristic of major infrastructure investments is the need to source large aggregated sources of long-term capital. Whilst the asset mix will vary from time to time according to market conditions there will remain in most large superannuation funds a need to invest in infrastructure projects. The significant and continuing growth in large property trusts, private infrastructure and specialist investment vehicles shows the growing appetite of superannuation funds for a variety of investment opportunities. National superannuation savings currently amount to around \$878 billion. Around about 5% of super funds are invested in infrastructure and this share is likely to increase.

Discussions with superannuation funds trustees have revealed a number of perceived impediments for increasing the level of investment into public infrastructure. They include:

1. A perception that by investing in community infrastructure they may be transgressing their responsibilities as trustees, which requires trustees to act in the best interests of their members. The fiduciary duties of trustees of pension funds have been tested in the courts and are often poorly understood by trustees in Australia. The famous so-called Scargill case in 1984 has tended to overshadow much of the discussion on directed investment strategies in the superannuation industry in Australia. The case did not rule out socially directed investment but sought to ensure that where such investments are made that they can expect to make 'a reasonable rate of return'.
2. A lack of suitable local investments at a scale that can be economically invested in. Many potential social investments are seen as unviable due to their small size. However as property trusts for example have demonstrated, if they are suitably aggregated through in intermediary structure, positive tax regime and reasonable rate of return, many more domestic investments could be funded.
3. A lack of expertise among many trustees to assess complex investment proposals has led to a high reliance on advisors, who in turn may have a predetermined preference for some classes of investment over others.

What is critical and what is lacking in the way funding is sourced and applied for public infrastructure in Australia is:

1. Mechanisms to determine what are strategically important investments at a national, regional and local level.
2. A robust, comprehensive and transparent method of cost benefit test that could be applied to such identified projects.
3. Facilitative intermediaries that can efficiently and creatively determine the optimum methods of funding such projects.
4. Creation of dedicated public infrastructure intermediaries able to draw in wholesale and retail funds as required by projects.



## 8. Some alternative strategies

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To significantly increase investment in public infrastructure, active consideration should be given to:

- Government special bonds
- Dedicated infrastructure funds
- Statutory initiatives
- Public interest corporations
- Intergovernmental leaseback arrangements
- Pooling of municipal debt

### Government special bonds

There are no reasons why special bond issues can't be made by government to fund specific infrastructure. The appetite for such bonds has been proven in the USA, Canada and Europe especially among superannuation funds that look, for part of their portfolio, for low risk, long term secure funding sources. Inflation-indexed bonds have been rarely used in Australia. Their use addresses a key concern of investors interested in traditional bond issues by government – and that is that they give too low a yield, and are fixed at inflexible rates over the longer term.

The National Farmers Federation in its 2004 federal election Priorities Statement supported the investigation of the introduction of tax effective bonds to promote infrastructure investment.

### Dedicated infrastructure funds

Unlike the PPP model of public infrastructure provision, which relies on the satisfaction of private sector criteria to maximise the rate of return, governments could facilitate the creation of dedicated infrastructure funds that are tailored to the strategic needs of communities.

On a small scale, the Canadian experience with community bond corporations has seen the proliferation of over 300 community-based corporations to fund local business and community infrastructure initiatives. These allow locally managed corporations to raise funds for community and business purposes. Guaranteed, once assessed by the Provincial Government,

these funds have proven over the last 20 years to be extremely successful in responding to local infrastructure and small business needs. Through the use of review committees, no Community Bond Corporation has failed and in all cases the principal of the bond issue has been returned to investors.

On a larger sectoral basis there is no reason, as ethical and directed investment sectors have demonstrated, that specific investment vehicles could not be created to meet long term needs. It can be seen in such initiatives as a Green Fund (Reforestation, Water Technology, Housing, Aquaculture), a Transport Development Fund (light rail, transport interchanges, rail network) or Health Fund (Capital Equipment, new hospitals, training programs).

### What is required is for government to act as a facilitator

#### Statutory initiatives

Rather than governments themselves undertaking borrowings another method is the establishment of specialised statutory authorities to facilitate market performance and to address market shortcomings.

Apart from the Fannie May and Freddie Mac examples in the USA, which control over one third of all mortgage securities in the USA, other countries have utilised this strategy to address problems of supplying social infrastructure.

The Canadian Mortgage and Housing Corporation (CMHC) is a government owned corporation, which issues bonds and mortgage-backed securities and uses its borrowing proceeds to provide mortgage and loan financing for social housing projects throughout Canada. Its bond issues are fully guaranteed by the Federal Government and are sold in the public bond market – thereby being available to both individuals and institutional investors. In addition to social housing it has also facilitated loan funds for local government.

The Scottish National Party has proposed the creation of not-for-profit public trusts as an alternative to PPPs.

The aim of these trusts is to reduce the cost of borrowing for infrastructure including schools, hospitals, prisons, and housing. The public trusts can borrow against future income streams to commission, construct own and operate schools and hospitals.

### Public interest corporations

In recent times there has been considerable discussion in the UK about creating Public Interest Corporations. These separately incorporated corporations, established by government but independent of government, act in a similar way to public trusts established in the past to manage public assets. Having been established these organisations would be able to borrow funds, raise capital and participate in entrepreneurial activities to provide a special public benefit. The UK government is actively considering the establishment of such bodies.

### Intergovernmental leaseback arrangements

Lease arrangements are a common mechanism to manage debt over the life of an asset. It is a common strategy employed by the private sector. It is not difficult to see how such a strategy could be employed by the public sector at all levels. Partnerships between federal, state and local governments could be created to finance much-needed infrastructure, with one tier of government owning the asset and leasing the asset to the operating partner. Varying the partnership shares could accommodate cost sharing and adjusting payment schedules to reflect each partner's responsibilities. In this way hospitals for example could be built and owned by the Federal government but operated by the states with each government amortising its expenses in the annual budgets over the life of the asset.

Borrowing costs could be minimised through special purpose bond issues in the same way as major property developers do on property developments, with the added advantage of a lower cost of funds.

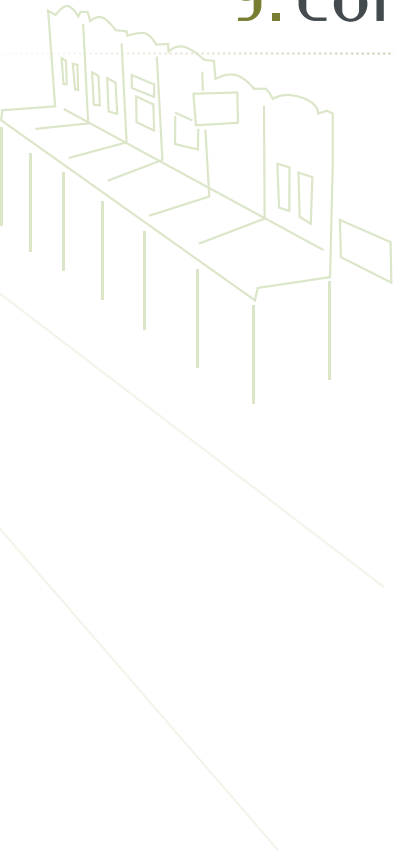
### Pooling of municipal debt

One innovation that has proved successful in Canada is the establishment of pooled financing authorities. These specialist finance intermediaries lower the cost of borrowings by pooling a number of small government authorities, debt requirements, issuing public bonds in the national and international bond market.

Municipal finance raising has been used in Canada to raise funds for schools, hospitals, utilities and transport. Under Canadian law, unlike Australian, these bond issues are guaranteed by the provincial governments and administrative costs covered by the provincial government. Provincial governments act therefore as facilitators rather than just regulators as they do in the Australian context.



## 9. Conclusion



What is clear is that there is a growing level of unmet demand for the provision of public infrastructure in Australia.

The historically under-funded and under-maintained infrastructure in the areas of health, transport, social housing, water, energy and education sectors are impacting on the capacity of the Australian economy to remain globally competitive and to effectively and fairly deliver infrastructure services to the community. The case for increased investment in these sectors is compelling and proven.

At the same time governments at both state and particularly federal levels have maintained a fiscal 'straight jacket' of surplus budgeting and lower taxation. In addition our unique federal /state/ local government funding and service arrangements have meant that the issue of funding responsibility, and therefore the solving of these problems, has been too often put in the too hard basket.

The issue of public infrastructure funding has exposed a critical flaw in the manner in which funds are raised and allocated for key infrastructure provision in Australia.

The problem has been magnified by a dominant ideology that confuses annual financial budget management with good economic practice.

There is a strong case to consider a number of innovative strategies that have been utilised successfully elsewhere in addressing what is not an insoluble problem.





# 10. Recommendations



- 1 The Federal Government should recognise that under-investment in infrastructure is a major impediment to Australia's economic and social development and put forward a target to increase public infrastructure investment by Australian governments and government-owned enterprises to 5% of GDP. This is equivalent to around \$50 billion per year for public investment in infrastructure.
- 2 New institutional arrangements need to be developed to improve cooperation and coordination between the three tiers of government in relation to public infrastructure. Consideration should be given to the establishment of an organization known as the National Infrastructure Council with a charter to increase public and private sector investment in economic, social and environmental infrastructure. The National Infrastructure Council should comprise representatives of the three tiers of government, industry, unions and community groups and be resourced sufficiently to undertake research and provide high level policy advice to the three tiers of government.
- 3 Given the high level of fiscal imbalance that exists between the three levels of government, the Federal Government should facilitate through legislation the capacity to establish:
  - Local community investment funds
  - Special purpose statutory investment corporations
  - Loan guarantee facilities for designated national infrastructure projects coupled with bond issues
  - Provide standby lines of credit to local, regional and state government projects thereby reducing the cost of public capital for the provision of local infrastructure.
  - A Grant Anticipation Note program to accelerate immediately needed investment.
- 4 The Federal Government should establish a national capital formation agency to facilitate the establishment of dedicated investment funds suitable for individual and institutional investment in infrastructure, particularly by superannuation funds. In the absence of national leadership state governments could enact enabling legislation to achieve the same outcome.
- 5 Rating caps on local authorities should be eased to enable increased expenditure on local infrastructure, subject to detailed economic and social evaluations of projects.
- 6 The current application of PPPs should be reduced to those programs that meet a comprehensive comparative analysis with alternative strategies.
- 7 The Federal Government should be approached to establish a Cities Development Corporation to work with state and local government to address major urban infrastructure impediments in Australia's rapidly growing urban areas.
- 8 AusLink should be extended to provide a framework for significantly increasing public transport in Australia's cities including new investments in heavy and light rail, and upgrading rolling stock.
- 9 A national inquiry should be held into Australia's knowledge infrastructure with a view to planning, developing and financing knowledge infrastructure at national, state and community level, to support a competitive, knowledge-based economy.



# Appendix

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## Case studies in innovative funding and financing



### Case study 1

#### The California Power Authority – Public leadership solutions for energy

The PULSE program offered public agencies and not for profit corporates structural finance to encourage the use of clean energy production. Lease financing was available through tailor made financing provided by a state authority issuing bonds on the open market. Established in 2001, the aim was to fund up to \$1.5 billion for new infrastructure and associated establishment costs.

Alameda County Jail was able to reduce its energy consumption by 30% under this program – a net saving of over \$15 million over the 25 year project.

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### Case study 2

#### Use of line of credit provisions for transport infrastructure

Under this project, standby lines of credit have been provided to county and local government for the purposes of building toll roads. The local government agencies can draw on lines of credit if revenues from tolls are insufficient to repay lenders.

The line of credit facilities reduces the cost of borrowing funds by reducing risk for lending institutions. In addition under the Transportation Infrastructure Finance and Innovation Act 1997, a federal government initiative, interest on the debt is exempt from federal income taxes. Any funds drawn down under the scheme are repaid at base Treasury rates, which means the federal government does not incur any costs under the scheme.

In effect the federal government acts as a lender to ensure local government has the capacity to meet infrastructure demand.

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### Case study 3

#### The Alameda Corridor project

The US federal government has agreed to provide funds for a major US\$2 billion road and rail link between Los Angeles and Long Beach. The federal government is providing an upfront loan of \$400 million at a subsidised rate during the start-up phase of the project. By agreeing to a 30 year loan repayment schedule the project is able to pay back the loan at the same rate as the federal 10 year note rate, from revenues generated by the road / rail / port infrastructure once completed.

The Alameda Corridor Transportation Authority has the capacity to seek flexibility from the repayment schedule if income does not meet the repayment schedule. The Federal Treasury, however, is returned its investment with interest.

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# Glossary of terms

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## **Budget deficit**

The expenditure of funds in excess of income received over a defined period.

## **Contracting out**

The bundling together of defined services in a form that can be provided by an external agency.

## **Debt financing**

The raising of funds through loans.

## **Debt markets**

A shorthand term to describe financial institutions involved in providing debt to government, companies and individuals.

## **Equity markets**

A shorthand term to describe those institutions involved in the raising, exchange and sales of shares.

## **Ideology**

An internally coherent set of values and ideas.

## **Loan Council**

A joint federal and state government instrumentality that establishes an annual level of acceptable levels of debt which all levels of government must not exceed.

## **Neo-liberalism**

A reformulation of the doctrine of laissez faire capitalism that the free market should be the arbitrator of need.

## **PPP**

A contractual arrangement involving the partnering of both public and private sector assets, expertise and resources to achieve the development of goods and services.

## **Private Finance Initiative - PFI**

The UK Blair Government's term to describe a range of public and private partnerships.

## **Privatisation**

The sale of publicly owned assets to private interests.

## **Public sector capital requirements**

Funds required by the state to build and maintain fixed infrastructure.

## **Recurrent spending**

Funds required to generate projects on annual or recurring basis eg. wages.

## **Revenue base**

The income generated by the project eg. road tolls.

## **Risk allocation**

The defining of the level of risk of the project collapsing.

## **Transparency**

The processes of negotiation, implementation and review that enable external parties to assess the probity and appropriateness of a decision.

## **Universal access**

The provision of a community service or goods to anyone requiring that service regardless of their income or status.



