



INFRASTRUCTURE DEVELOPMENT IN COMPARATIVE NATIONS

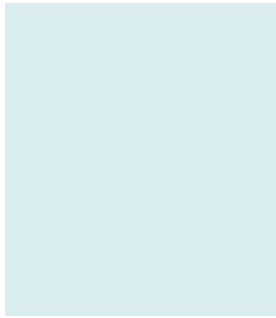
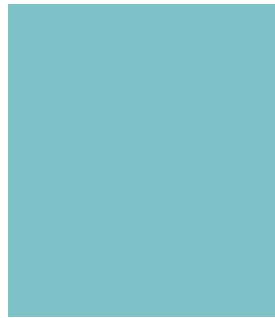
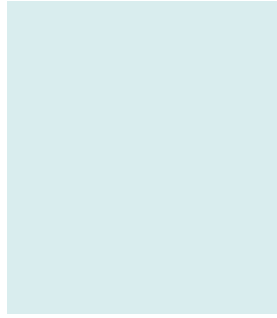
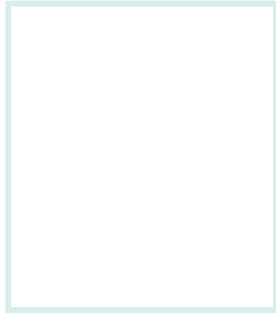
INSIGHTS FOR NEW ZEALAND



Stephen Selwood
Chief Executive | NZCID

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September 2006



↘ Project partners

NZ Council for Infrastructure Development



NZCID is an authority at the forefront of infrastructure development issues. Our members stem from sectors across New Zealand, equity owners, service providers, public sector agencies, major infrastructure users. Together we share a clear purpose: world class infrastructure for the benefit of all New Zealanders.

↘ www.nzcid.org.nz

Kensington Swan



Infrastructure is a specialty of law firm Kensington Swan. Their team of specialists have advised on some of New Zealand's largest infrastructure projects. They have significant experience in construction, commercial property and environmental law and can provide reputable and commercial advice to those interested in or about to embark on major infrastructure projects.

↘ www.kensingtonswan.com

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Paul is the Business Director of Kensington Swan's Infrastructure Business Unit. He has vast experience in construction law, infrastructure projects and civil and commercial litigation. The range of Paul's client base is broad, stretching from private individuals to large companies and local authorities. Paul has dealt with a wide range of infrastructure issues. He provides specialist advice on the tender process, contract documentation, claim preparation and presentation, and dispute resolution (whether by mediation, arbitration or litigation). Paul has significant front end experience. He provides advice on major infrastructure standard and specialist construction contracts, including NZS 3910, FIDIC, Alliance and Collaborative Contracts and PPPs.

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Stephen leads NZCID's advocacy of and investigation into key infrastructure development issues in NZ and abroad. This key role is focused on highlighting the direct link between world class infrastructure and New Zealand's capacity to achieve its economic and social potential. Stephen is particularly well known in local body, central government, & media circles for his expertise on infrastructure policy matters. He is a regular adviser, commentator & guest speaker both in the media & in public forums on these subjects. Until his CEO appointment with NZCID, Stephen held various senior management positions with the Automobile Association in both operations management and most recently as General Manager Transport Policy, responsible for leading policy development & advocacy for roading infrastructure, transport, safety & motoring issues.



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Executive summary

I Purpose

A key objective of the New Zealand Council for Infrastructure Development (NZCID) is to encourage best practice in national infrastructure development within New Zealand.

With this objective in mind, Paul Buetow (Construction Partner Kensington Swan - a member organisation of NZCID) and NZCID Chief Executive, Stephen Selwood, undertook a study trip to the United Kingdom, Ireland, Victoria, New South Wales and Queensland in May 2006. The purpose of the trip was to examine what comparative jurisdictions are doing to meet their infrastructure development needs, and how lessons learned can be applied to New Zealand.

Particular matters of focus included:

- > The role of government in infrastructure development
- > The nature and extent of national infrastructure development planning in each jurisdiction
- > Planning approval and environmental consent processes for major infrastructure development projects
- > Governance
- > Responsibility for implementation
- > Identification of best practice in the use of the private sector in assisting the infrastructure development programme

Meetings were held with a range of public and private sector organisations including: Treasury, Infrastructure, Transport, Environmental and Planning departments, together with site visits to specific projects of comparable scale and size to New Zealand.

I International comparisons

International comparisons always need to be handled carefully. The need for infrastructure spending depends on a country's industrial structure, configuration and geography, and stage of development. In selecting both the Australian States and Ireland for comparison purposes, consideration was given to the size, scale, cultural, political and economic characteristics that are generally similar to New Zealand.

This report details the findings from the research trip. It is not intended to provide a detailed report on infrastructure development in each of the countries. Rather the report highlights key differences in approach between New Zealand and each of the jurisdictions visited and the need for change in New Zealand.

I NZ's infrastructure development in context

The World Economic Forum's 2005 Global Competitiveness Report (GCR)¹ ranks New Zealand 22nd in the world (19th out of 30 in the OECD) for the overall quality of its infrastructure. The Institute for Management Development World Competitiveness Yearbook puts New Zealand 33rd of the 51 countries surveyed (21st in the OECD) for the adequate planning and financing of infrastructure.

¹ Available at <http://www.weforum.org/en/initiatives/gcp/Global%20Competitiveness%20Report/index.htm>

The trend towards infrastructure decline has been felt internationally since the seventies. However, research undertaken by NZCID has shown that in contrast to the countries that we compete with, and compare ourselves to, New Zealand has felt this decline more acutely and has been slower to redress past infrastructural under investment.

There has been a significantly improved focus on infrastructure development needs within New Zealand, particularly within the last two years. Nevertheless substantial concerns remain about the adequacy of long term planning, the availability of funding, the adequacy of the regulatory environment, together with governance, planning and approval processes to enable timely investment in infrastructure.

In 2005 New Zealand is spending less on fixed investment as compared with Ireland and Australia.

Like Australia New Zealand has a low debt to GDP ratio and consequently has significant capacity to borrow. Despite this, many economic projects are currently not proceeding in New Zealand due to lack of available funding.

When discussing costs, the social, economic and environmental costs of deferring projects must also be considered. Advancing infrastructure development by use of both public and private debt finance makes good sense when the benefits derived from the projects exceed the costs.

I Government leadership & commitment

The support of: the Blair Government in the United Kingdom; the Prime Minister and Minister of Finance in Ireland; and the Premiers of New South Wales, Queensland

and Victoria have helped drive national strategic infrastructure development. In both Ireland and the Australian States, there is very strong political support for and central direction of the infrastructure development programme.

“Throughout metropolitan Melbourne and country Victoria, hundreds of new projects are laying the foundations for future opportunity, wellbeing and prosperity for all Victorians”

➤ Hon. Steve Bracks, Premier

The pronouncement of central and local government in recent times has aided the upsurge of economic development in New Zealand. However, progress needs to be faster and must be led at the highest levels to be successful.

I National planning & direction

In marked contrast to the situation in the Australian States and Ireland, New Zealand has no central plan or prioritisation of national funding for public infrastructure. Planning decisions are substantially delegated to the lowest level of local government with few national standards to guide decision making. Within that context planning, funding and implementation can be extremely complex. Structures are characterised by a lack of transparency, accountability and responsiveness to users of the system.

A key feature of Ireland, Victoria, New South Wales and Queensland is the development of national infrastructure development plans which take an holistic long term approach and which have strong government support and direction.

There is recognition of the need to provide certainty on infrastructure development to enable forward planning, capacity building and innovative project delivery. This is based on the principle that strategically-focused infrastructure investment will help lead and support social and economic development and achieve key policy outcomes. The plans specifically recognize that in some instances this means implementation ahead of existing need.

The Irish National Development Plan is promoted aggressively by government and has widespread public support. Unlike previous plans, Ireland's economic success has meant that the latest plan will receive little European Union funding support but will be almost totally funded by the Exchequer. Private sector financing is also being used extensively.

Each of the Australian States has an infrastructure development plan:

- > South-East Queensland Infrastructure Plan and Programme 2005-2026
- > Building One Victoria 2005-2010
- > New South Wales State Infrastructure Strategy 2006-2016

Like Ireland's National Development Plan the Australian plans aggressively promote infrastructure development to drive social and economic growth. Implementation of the plans is managed and supported by specific government departments, with strong connection to Treasury and the budget process, and with clear emphasis on responsibility and accountability for implementation.

I Planning & consents for major projects

The length of time projects take to go through

the planning and consenting process, the complexity of the process, the range of legislative processes involved, and the costs of delays is a major issue in New Zealand. It is also an issue that is faced, but is being addressed, in the United Kingdom, Ireland and Australia.

To overcome the delays being encountered for obtaining planning approval and to streamline the consent framework for infrastructure of public importance (defined as projects of strategic, economic or social importance, which contribute to national or regional strategies) the Irish Government introduced the Planning and Development Strategic Infrastructure Bill 2006.

The Bill provides for the establishment of a new planning board which will provide a one-step consent process (with provision for consultation with the decision makers) for energy, transport, waste and water infrastructure projects. This will avoid first having to get local authority approval, reducing the length of time it takes to get development consent/planning permission. The process for judicial review applications and appeals is also being reviewed to try and reduce the time delays associated with judicial review challenges.

In New South Wales, a recent amendment to the Environmental Planning and Assessment Act provides a streamlined assessment and approvals process to ensure that critical infrastructure is delivered as quickly as possible without compromising on environmental outcomes. In most circumstances, a concept approval will be obtained. It will be used to establish the environmental performance requirements for the implementation of the subsequent stages of the project and to set out consultation requirements. The project will be carried out in accordance with that approval. The need for additional approvals under eight other Acts has been replaced by a single integrated

assessment and approval.

The Victorian Government has also identified the need for specific legislation to facilitate critical infrastructure projects. Such legislation was used for both Citylink and Eastlink road projects in Melbourne and is also proposed for the Channel Deepening Project with the Port of Melbourne. Legislation for such projects is aimed at streamlining the planning process rather than overriding it.

New Zealand has been a leader in environmental issues. However, it needs to ensure that the consenting process for infrastructure projects is not cumbersome, difficult and expensive. A streamlined consenting process which provides for consideration of national needs is important for projects of national importance. Based on lessons learned from overseas jurisdictions, consideration needs to be given to one or more of the following:

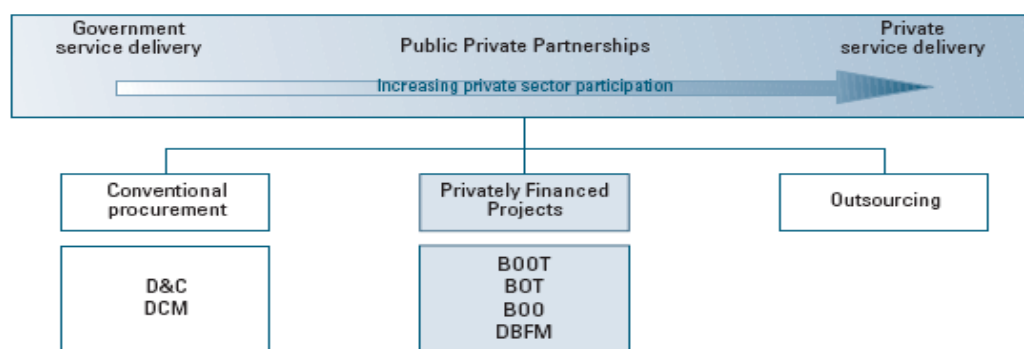
- > The development of new legislation specific to projects of national importance or amendments to the Resource Management Act (RMA) to allow for it
- > Project consolidation—especially for contiguous transport projects (eg: : Waikato Expressway and Auckland's Western Ring Route)
- > Better use being made of the "call in" process under the RMA

- > Further streamlining the Environment Court process along the lines set out in the Irish Planning and Development (Strategic Infrastructure) Bill
- > Improvements of the designation process, including direct reference to the Environmental Court for major projects
- > Adoption of outline or concept planning approvals

I Procurement

The traditional procurement model adopted in New Zealand of the public authority having a consultancy agreement with an engineer or architect, a construction contract with a contractor, and financing contract with a bank or financier (if required), is the most used model in Ireland, the United Kingdom, Australia and New Zealand. These contracts are largely based on separate parties having separate responsibilities, with the public authority usually taking over responsibility for the operation and maintenance of the infrastructure or awarding a separate contract for it.

However, other procurement options are becoming more widespread and reflect the advantages that can occur if one party takes on the responsibility (and risk) for a number of tasks. Figure 1 depicts the public service delivery spectrum.



Choosing the best procurement method

Overall, the appropriate procurement structure for a project is that which provides the best value for money for the project. Value for money is a concept embracing efficiency, effectiveness and economy rather than just least cost. The value for money drivers in different procurement structures are:

- > An appropriate allocation of risk between the parties
- > A procurement structure which optimises the whole of life costs over the life of the project.
- > An output based specification, reducing the complexity and risk for the public sector procurer
- > Sufficient flexibility to allow for changes in service requirements over time, while providing sufficient certainty over what is required
- > Appropriate incentive structures for the private sector to deliver services in a timely and efficient manner
- > Risk management expertise through external due diligence or specialist risk management providers
- > A consideration of the costs of finance and the ability to access revenue to service debt

Private Finance Initiatives

The overwhelming impression from the

jurisdictions visited is that use of Private Finance Initiatives² (PFIs or Public Private Partnerships, PPPs) provides a useful option for leveraging both private sector financing and expertise for public infrastructure projects.

PFIs/PPPs are particularly suited to complex projects of substantial size which require extensive cooperative effort on the part of the project partners.

A key benefit is that equity in the project incentivises the private sector to focus on long term outcomes in a partnership with the public sector.

From a public sector viewpoint the injection of private finance frees up public funds for other infrastructure projects or other public spending such as health and education.

Strong political support and buy-in is critical to the success of PFIs, as is the establishment of centres of expertise within the public sector to ensure the necessary specialist skills are developed and maintained to the standard required. There is a wealth of information available internationally to guide the public sector in their successful implementation, including both policy guidance and standard contract terms.

PFIs have their costs and complexities. For this reason they are not suitable to the majority of public sector projects and typically comprise 10% to 15% of national public works. However when applied correctly, when outputs can be clearly specified and performance transparently measured, experience has shown PFIs offer value for money, faster project delivery, and better whole of life asset management over more traditional procurement methods.

² The acronyms PPPs (Public Private Partnerships), PFIs (Private Finance Initiatives), and PFPs (Private Finance Projects) are commonly used and describe the private financing of public infrastructure. Although the term PPPs has a wider meaning, in this report these acronyms are used interchangeably to describe the private financing of public infrastructure. A glossary of terms is provided at the rear of the report..

➤ Conclusion

Having examined infrastructure development in New Zealand in comparison with Ireland, United Kingdom and with Victoria, New South Wales and Queensland a number of key conclusions can be drawn.

Firstly it must be acknowledged that the New Zealand Government has recognised the need for significant infrastructure development and taken action to redress the deficit. However, despite the Government's best efforts, progress in New Zealand is slow relative to each of the comparative locations visited.

Six key steps need to be taken to speed up the process and deliver the infrastructure New Zealand desperately needs:

1. Government leadership and commitment to national infrastructure development
2. A long term integrated plan
3. A streamlined planning and approval process, particularly for projects of national or regional importance
4. Integrated planning and governance
5. Adoption of a wider range of procurement and financing options, including the appropriate mix of public and private financing of infrastructure based on value for money criteria. This should include greater debt financing by the government and the use of PPPs
6. Legislative change

↘ Introduction

The New Zealand Government recognises that significant investment is required to catch up on past infrastructural underinvestment and to keep pace with the nation's social, economic and environmental needs. It has placed infrastructure development as a priority component of its plans for economic transformation.

With this in mind, NZCID representatives Stephen Selwood (Chief Executive) and Paul Buetow (Construction Partner Kensington Swan) undertook a study trip to the United Kingdom, Ireland, Victoria, New South Wales and Queensland to examine what other comparative jurisdictions are doing to meet their infrastructure development needs.

This report describes in detail the findings from their research.

Particular matters of focus included:

- > Role of Government in infrastructure development
- > The nature and extent of national infrastructure development planning in each jurisdiction
- > Planning approval and environmental consent processes for major infrastructure development projects
- > Governance
- > Responsibility for implementation
- > Identification of best practise in the use of the private sector in assisting the infrastructure development programme

Meetings were held with a range of public and private sector organisations including:

The United Kingdom:

- > HM Treasury PFI Division

- > 4Ps
- > Partnerships UK
- > PPP Forum
- > Department of Transport

Ireland:

- > Department of Finance
- > National Development Plan Infrastructure Division
- > PPP Unit
- > National Roads Authority
- > National Toll Roads – including a site visit to Northlink a recent PPP project
- > SIAC / Cintra – including site visit to M4/M6 Kilcock – Kinnegad PPP
- > Environmental Protection Agency
- > Automobile Association
- > Attendance at the European PPP Conference 2006 in Venice

Victoria:

- > Environmental Protection Agency
- > Australian Centre for Public Infrastructure University of Melbourne
- > South Eastern Integrated Transport Authority
- > Partnerships Victoria

New South Wales:

- > Australian Council for Infrastructure Development
- > NSW Treasury
- > Infrastructure partnerships Australia
- > Department of Planning

Queensland:

- > Office of the Coordinator General

PART A New Zealand infrastructural investment in context

While the trend towards infrastructure decline has been felt internationally since the seventies, research undertaken by NZCID has shown that in contrast to the countries that we compete with, and compare ourselves to, New Zealand has felt this decline more acutely and has been slower to redress past infrastructural under investment.

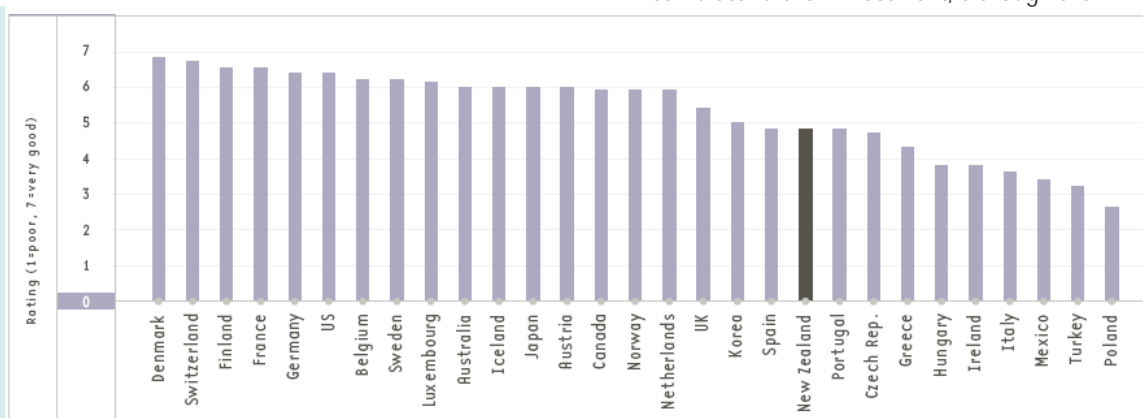
The World Economic Forum's 2005 Global Competitiveness Report (GCR)³ ranks New Zealand 22nd in the world (19th out of 30 in the OECD) for the overall quality of its infrastructure (see Figure 2). The Institute for Management Development World Competitiveness Yearbook puts us 33rd of the 51 countries surveyed (21st in the OECD) for the adequate planning and financing of infrastructure. We rate well in the GCR in some specific sectors, including quality of ports – 13th (10th in the OECD), aviation infrastructure – 13th (9th in the OECD), and telephone infrastructure quality – 16th (12th). However, we score relatively poorly for the

quality of our electricity supply – 30th (23rd), and our rail infrastructure – 31st (23rd).

In 2005 NZCID commissioned NZIER to review the level of investment in infrastructure in New Zealand and compare our performance with other OECD nations.⁴ Their report indicated not only that New Zealand is falling behind other nations in redressing its infrastructure deficit, but also raised questions about the efficiency with which New Zealand is using its limited funds.

Figure 3 extracted from the report shows the decline in investment in electricity, gas, water, and transport and storage as a share of GDP since the seventies.

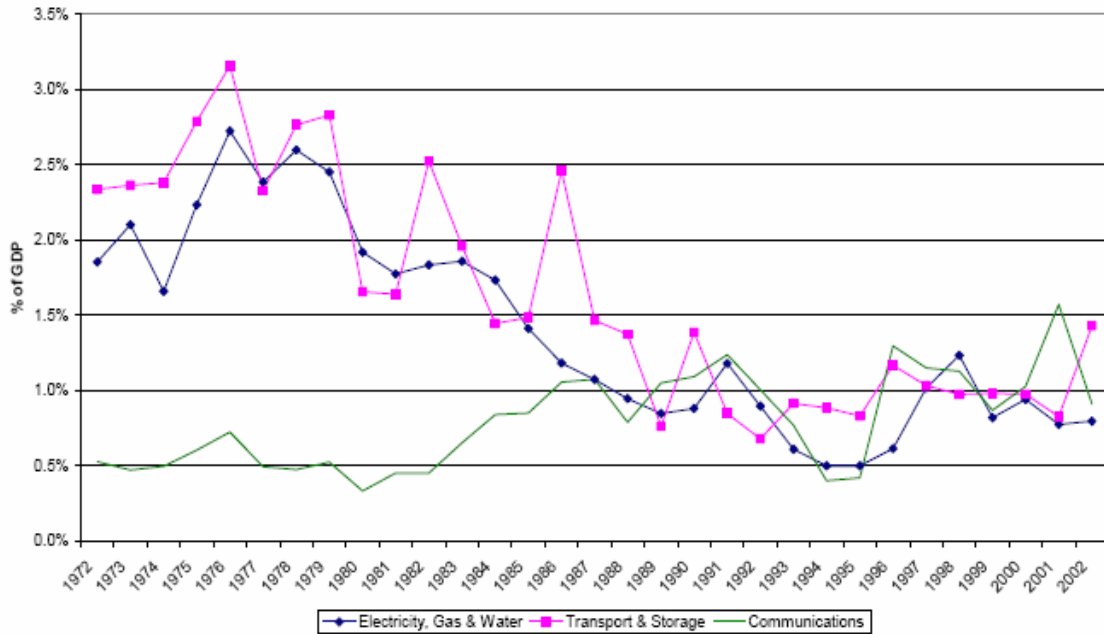
Despite recent concerns at broadband speed and the cost of mobile termination rates in NZ, Figure 3 shows there has been a rise in investment in communications infrastructure in New Zealand over the last 10 years. A combination of expanding demand, new service possibilities, competition and disputes over access to common networks, and gradual increase in regulatory certainty have led to conditions for infrastructure investment. Recent moves by the Government to unbundle the local network are expected to increase competition in the market and stimulate further investment, although the



2 National infrastructure quality ratings (World Economic Forum 2005)

³ Available at <http://www.weforum.org/en/initiatives/gcp/Global%20Competitiveness%20Report/index.htm>

⁴ NZIER Summary Infrastructure Benchmarks, Report to New Zealand Council for Infrastructure Development, available



3 Gross fixed capital formation in NZ infrastructure 1972-2002 (GHD, 2005)⁵

impact of such change has yet to be seen. Emerging trends in wireless broadband technology may well precipitate this development.

In contrast, the water, energy and transport sectors have not enjoyed such favourable conditions for investment.

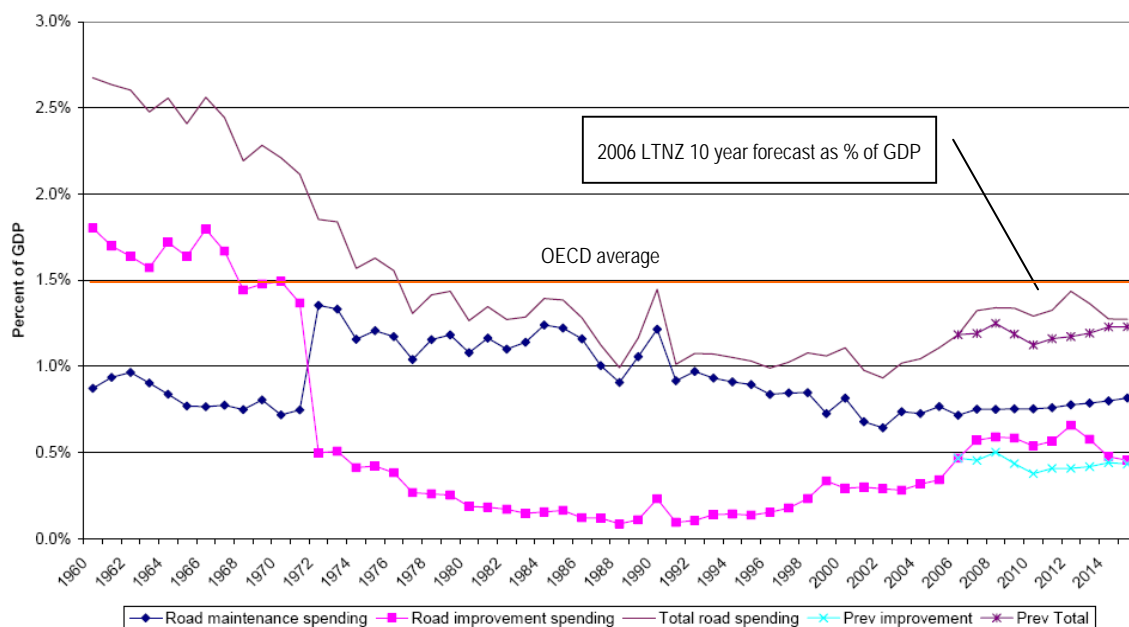
Water is still largely under the influence of local government ownership many of whom are struggling to find the necessary funds to upgrade their water infrastructure assets. Investment and demand management measures are constrained by legal restrictions on charging for water and wastewater services.

Investment in energy infrastructure has been slow to expand after deregulation and the creation of competitive suppliers. Since 2003 there has been a substantial increase in applications for planning approval for generation projects, particularly wind projects,

both large and small. While the short term electricity generation capacity looks to be sufficient to meet demand over the next 5 years, concerns remain over issues such as transmission capacity, long term gas supply, protracted Resource Management Act processes for large projects, and the increased risk of asset stranding in a regulatory environment which is still subject to change. The Government is currently developing a National Energy Strategy which is aimed at providing improved central government leadership and direction for the energy sector, but it remains unclear whether these key issues will be addressed.

The Government has also recently moved to redress the inadequate level of funding for transport by boosting funding to Land Transport New Zealand. As a result of the 2005 Budget, LTNZ is forecast to spend a record \$24 billion on transport over the next 10 years, of which \$11 billion is allocated for new capital works.

⁵Gross Fixed Capital Formation is the term used in the System of National Accounts to refer to gross investment in tangible assets.



4 NZ Road Spending 1960 to 2016 (GHD 2006)⁶

Notwithstanding this improvement, as a proportion of GDP, the rate of investment will be marginally below the OECD average of around 1.5% of GDP. It will also be half the rate New Zealand used to invest in its roading network through the sixties and early seventies (see Figure 4). The graph projects the increased funding to 2015 based on the 2005 and 2006 Land Transport New Zealand forecasts.

I Comparison with Australia

In 2005 NZCID commissioned GHD to contrast infrastructure development in New Zealand and Australia.⁷

GHD found that while Australians are seriously concerned about the inadequate condition of their infrastructure, comparing the key water,

energy and transport sectors, New Zealand's performance was inferior on all counts. Their key findings for each of the sectors reviewed are set out below:

Water

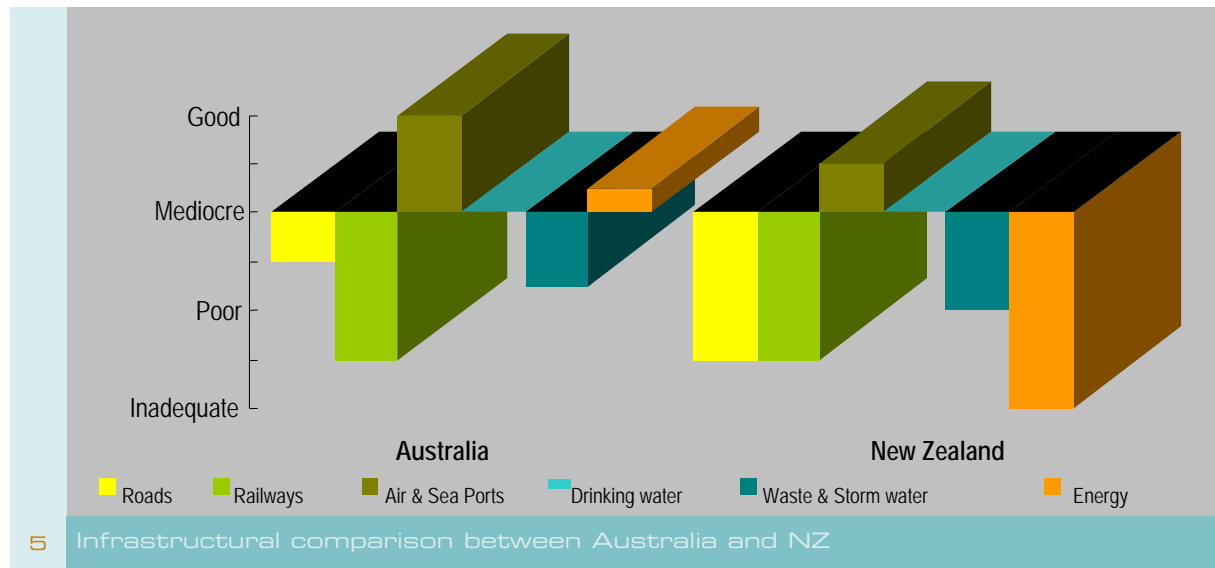
New Zealand would not rate well if measured on its level of active strategic management and the impact of regulation and legislative oversight on the efficient management of water infrastructure.

Energy

New Zealand would be rated "inadequate" as critical changes are required to enable infrastructure to be fit for purpose for its current and anticipated purpose.

⁶ 2006-2015 projections are based on the comparison of the LTNZ 2005 and 2006 funding forecast with NZIER projections of GDP.

⁷ Comparing Infrastructure in New Zealand and Australia: Key Lessons For New Zealand. A copy of the report is available at the NZCID web site www.nzcid.org.nz



Transport

New Zealand would be rated poor. It is simply not investing in new transport infrastructure with new funding of the same order as Australia.

GHD concluded:

- > If something is not done then there is the potential for New Zealand to enter into a period of infrastructure drought. This will severely damage our international standing, lead to migration of business and a lowering of our standard of living
- > Infrastructure needs to be seen as important and debate should be encouraged
- > Funding is a significant constraint and solutions that provide for greater involvement of the private sector should be considered
- > Significant institutional governance and public policy issues need to be resolved and
- > Infrastructure needs to be planned in a

coordinated manner to meet not only current needs, but also future needs

Improving transport infrastructure

Subsequent to the preliminary study described above, NZCID commissioned GHD to undertake a comprehensive analysis of what must be done to ensure New Zealand's future transport needs will be delivered for the next twenty years. The results of this analysis were published in April 2006 in a report entitled "Meeting New Zealand's Transport needs to 2025".⁸ The GHD report identified four key actions required to redress New Zealand's transport infrastructure deficit:

Key transport actions

- A forward looking 20 year national land transport development strategy must be developed which clearly sets out the infrastructure development programme, funding and accountabilities.

⁸Report and NZCID summary analysis available at <http://www.nzcid.org.nz/reports1.html>.

- A long term secure and sustainable funding base needs to be agreed and committed.
- Governance of the transport sector must be improved to provide clear responsibility and accountability for delivery of the transport plan.
- A streamlined consenting process is required for approving projects of national importance. This should be done through development of a new legislative mechanism specific to projects of national importance and incorporating all relevant existing legislation, or through the enhancement of existing legislation to encourage greater use of RMA call in powers.

The need for each of these core actions was reinforced in all of the jurisdictions visited on the study trip. Other key messages included the need for the consideration of all procurement options; and, perhaps most importantly, the need for high level government support.

In summary, while there has been a significantly improved focus on infrastructure development needs within New Zealand, particularly within the last two years, there remains substantial concern about the delivery of the core actions to enable timely investment in infrastructure.

These were the specific areas of interest that were examined as part of the study trip. Parts B to I of this report describe how these issues are being dealt with using examples from the various countries visited.

International comparisons

PART B

International comparisons always need to be handled carefully. The need for infrastructure spending depends on a country's industrial structure, configuration and geography, and stage of development. In selecting both the Australian States and Ireland for comparison purposes consideration was given to the size, scale, cultural, political and economic characteristics that are generally similar to

New Zealand. The United Kingdom was selected as it is by far the most advanced nation in the world at using the PPP model for infrastructural investment.

Figure 6, below, provides some basic comparative data between each location. Where information was unavailable for individual Australian states, the Australian average has been used.

New Zealand and Victoria are both of comparable size. Both are slightly less than 4

	New Zealand	Ireland	Victoria	Queensland	NSW
Area (sq km)	268,680	70,289	227,416	1,730,648	800,642
Population	4,076,140	4,062,235	5,052,400	4,001,000	6,803,000
Population of largest urban centre (millions)	1.2	1.5	3.6	1.8	4.3
GPD (PPP) \$US billion	102	165	159	114	220
GDP per capita \$US	25,200	41,000	31,541	28,473	32,268
Average annual growth rate last 5 years to 2005	3.9	7	3.8	4.8	3.2
Investment (gross fixed) as % GDP	23.8%	27%	25.9%		
Public debt as % GDP	21.3%	26.7%	16.1%		

6 Comparative national statistics⁹

⁹ Sources: <http://www.nationmaster.com/country> ; <https://www.cia.gov/cia/publications/factbook> ; <http://www.abs.gov.au/>

times the size of Ireland in area. In comparison New South Wales and Queensland cover a land mass many times the size of New Zealand. The main cities of Melbourne, Brisbane and Sydney comprise the majority of the population of the Australian States. In comparison both Ireland and New Zealand's population spread are very similar, with both main centres of Auckland and Dublin being of comparable size.

Ireland's economic growth over the last 10 years has averaged 7%. The average growth rate in New Zealand and each of the Australian States has been in the 2.5%-5% range.

While agriculture has been a predominant industry in each of the locations, the mineral wealth of the Australian States is a key economic driver. Ireland's transformation from an agricultural based economy to a modern industrial service economy has been supported by substantial investment from the European Union and the introduction of business friendly regulatory and tax policies. Ireland's successes have been such that in many cases it no longer qualifies for European subsidies for project finance.

As a general observation, funding for infrastructure development in Ireland, the Australian States and the United Kingdom is considerably more centrally controlled than in New Zealand. In Ireland, domestic rates were abolished in the late 1970s. The Irish Exchequer is a significant source of funding at present, as is the use of private sector funding through PPPs. The dependence on the Exchequer has led to charges that the Republic has an overly centralized system of local government. Additional sources are rates on commercial and industrial property, housing rents, service charges and borrowing.

Gross fixed investment and public debt as a percentage of GDP (both at 27%) are higher in Ireland than the average for Australia (which

has a very low public debt ratio of 16.1% and gross fixed investment of 26%). At 23.8% of GDP New Zealand's gross fixed investment in 2005 was the lowest of each of the countries, and, Australia aside, New Zealand has among the lowest public debt to GDP ratio in the OECD.

In summary New Zealand is currently spending less on fixed investment than both Ireland and Australia. It also has significant capacity to borrow. An obvious conclusion is that New Zealand should use this capacity and invest in infrastructure which provides a positive economic return. Advancing infrastructure development by use of debt finance makes good social, environmental and economic sense when the benefits derived from the projects exceed the costs, including any costs of debt financing.

↗ National PART C infrastructure governance and planning

Perhaps as a result of the more centralised funding approach adopted by each jurisdiction, a key feature of Ireland, Victoria, New South Wales and Queensland is the development of national infrastructure development plans. These plans take an holistic long term approach and have strong “whole of government” direction and support.

There is recognition of the need to provide certainty on infrastructure development to enable forward planning, capacity building and innovative project delivery. This is based on the principle that strategically-focused infrastructure investment will help lead and support social and economic development and achieve key policy outcomes. The plans specifically recognize that in some instances this means implementation ahead of existing need.

I Decentralised NZ

In comparison, New Zealand has little coordination of its national infrastructure planning, other than by means of budget allocation. There is no single national programme of infrastructure development.

Generally speaking government departments (education, health, justice, defence) or Crown agencies develop plans and seek funding through the central government budget process. Within this broad framework, the education, health and transport sectors have their own structures of delegated responsibility.

Education

Infrastructure management of New Zealand’s state schools is a shared responsibility between the Ministry of Education and individual Boards of Trustees comprising elected parent and community representatives. The Ministry assesses the need for new schools, and sets policies that ensure they use their property to the best educational advantage. The Boards of Trustees prepare and implement a 10-Year property plan and look after day-to-day property requirements. For integrated schools the relationship with the Ministry is different in that the school’s property is owned privately and not by the Crown.

Health

Health infrastructure is administered by 21 District Health Boards (DHBs). They have responsibility for improving, promoting and protecting the health of communities, promoting the integration of health services (especially primary and secondary care services), and promoting effective care or support of those in need of personal health services or disability support within their respective districts. The Ministry of Health provides strategic direction in terms of health care needs, sets out accountability documents and works with DHBs to make sure that these are understood and that requirements are met.

Transport

Within the transport sector, national state highways are administered by Transit New Zealand and the national rail network by Ontrack (both Crown agencies), while local roads and public transport infrastructure is managed by local authorities. All of these agencies apply for funding for their respective work programmes by application to Land Transport New Zealand (LTNZ). LTNZ has no specific planning responsibility but allocates funds to projects in accordance with their

assessment of the fit with the broad goals of the NZ Transport strategy.

Energy

Energy generation and transmission operates within a regulated market environment with planning devolved to the four main generation companies (three of which are State Owned Enterprises) and a large number of small independent generators. Transmission planning lies with the national grid operator, Transpower, regulated by the Electricity Commission and the Commerce Commission. Regional distribution is in the hands of 28 electricity lines businesses, some large, some small, under a Commerce Commission regulatory regime for pricing.

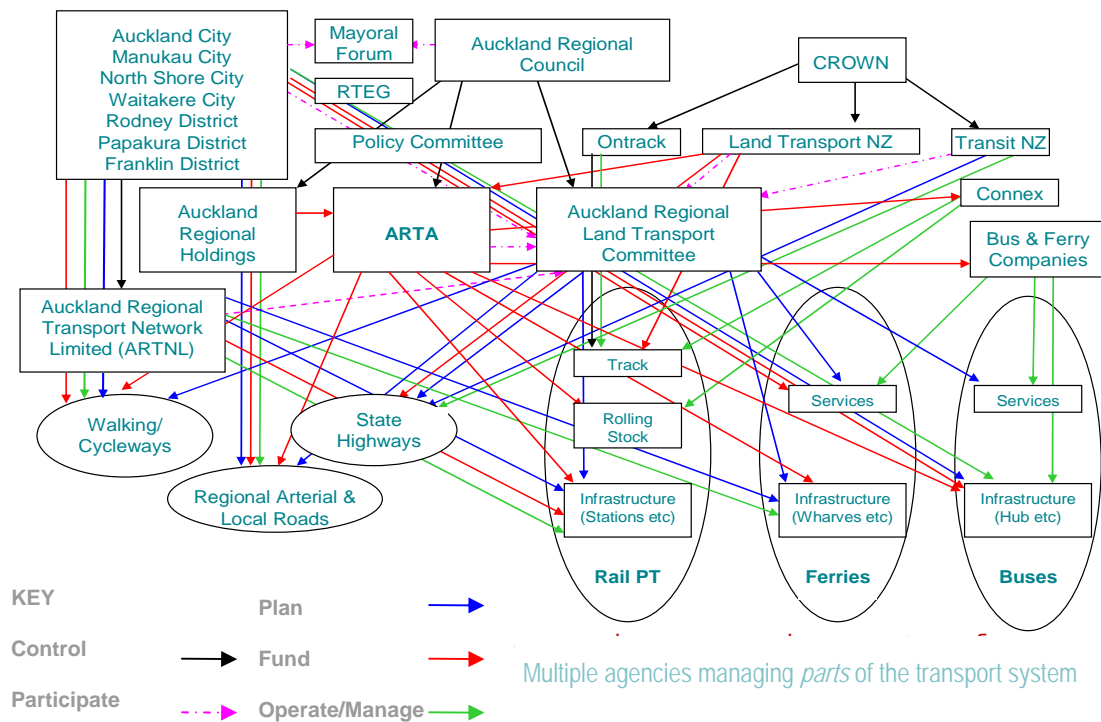
Telecommunications

Telecommunications infrastructure investment is controlled by private companies. The most

notable in order of size and scale include Telecom NZ, TelstraClear, Vodafone, Broadcast Communications Limited (fully owned by Television NZ), Woosh Wireless, Citylink, Tangent, and Wired Country. These companies operate in a regulatory framework established by government.

Local and regional governance

Much infrastructure (including water, storm water, roads, public transport, footpaths, and street lighting) and most of the planning approvals for both national and local projects come under the responsibility of 73 City and District Councils and 13 Regional Councils. They are funded by a combination of rates funding and central government funding (primarily in the form of local roading and public transport subsidies). Most local authorities are facing difficulties funding increasing infrastructure needs on a limited



rate payer funding base.

Within that context planning, funding and implementation can be extremely complex. This is perhaps best illustrated by transport governance in Auckland.

The establishment of the Auckland Regional Transport Authority under the Local Government (Auckland) Amendment Act 2004 was designed to:

- > Improve *integration* of the Auckland regional transport *system*
- > Improve management of land transport funding and assets for the Auckland region
- > Integrate land transport and land use planning to ensure consistency with the Auckland Regional Growth Strategy and Auckland Regional Land Transport Strategy

These goals are founded on the precept that transport is a *system* and that its component transport modes, corridors and land use development are mutually dependent. Despite this, the governance structure established under the Act remains largely disintegrated as illustrated in Figure 7.

As the diagram clearly illustrates, there is no one agency responsible for the regional transport *system* as a whole. Transport management and control is shared among various agencies which individually control only parts of the system. Decision making processes are complex. Reconciliation of conflicting priorities is dependent on effective alliances being established between the parties. In the absence of agreement, priority conflicts must be reconciled via the Land Transport New Zealand funding allocation processes and or by means of central government lobbying. Transparency and accountability and responsiveness to users of the system remain unclear.

Governance summary

Overall, New Zealand is characterised by a highly decentralised and, in some cases, extremely complex governance structure. There is no central plan or prioritisation of national funding for public infrastructure. Planning decisions are substantially delegated to the lowest level of local government with few national standards to guide decision making. This is in marked contrast to the situation in the Australian States and Ireland.

Irish National Development Plan

The 2007 – 2013 National Development Plan which is to be finalised this year is the fifth in a series of plans since the 1950s. Two plans were developed in the 50s and 60s and one in the late 80s, the latter being a requirement for Economic Union funding.

The most recent 1999 to 2006 plan placed significant emphasis on skills development and social infrastructure (schools, hospitals etc) as opposed to economic infrastructure (electricity, transport and telecommunications). However, there was considerable investment in water supply and waste water infrastructure during this time as the result of a need to redress past underinvestment.

The 2007–2013 plan will have a very strong emphasis on economic infrastructure. It programmes 5% of Gross National Product to be spent on capital investment over 7 years. This reflects recognition by government of past underinvestment within this sector when, historically, it has been easier to delay infrastructure spending.

Unlike previous plans, the latest will receive little EU funding support (which is expected to be of the order of 5% of the total allocated). This is because Ireland's successes have been such that in many cases it no longer

qualifies for European Union subsidies for project finance.

Each government department will be given a capital envelope within which they must work. For example, the Irish Department of Transport will have a guaranteed amount of €34 billion for capital investment over 10 years commencing 2006. This provides certainty of funding for planning purposes. If there has been under spending departments are able to carry over 10% of their budget each year.

Public buy-in

The National Development Plan (NDP) is promoted aggressively by the Irish Government and seems to have widespread public support. Everywhere in Dublin, the NDP logo is visible on project work sites, on the sides of buses and elsewhere. In discussion with locals, one gets a sense of pride in the level of investment that is occurring.



The plan focuses on the development of the six provincial cities as “gateways” to development: Letterkenny, Sligo, Galway, Limerick, Cork and Waterford. Tertiary education gets a very strong focus, and development of environmental services and

social infrastructure builds on the investment of the previous seven years.

The investment programme of the state owned energy companies will be incorporated into the plan for the first time in an effort to clearly integrate strategic development planning across all sectors into one national plan.

By far the most significant investment goes to transport infrastructure with an emphasis on public passenger transport in Dublin, and road and rail investment linking Dublin and the six gateway cities. A key element to the future NDP is the Transport 21 Plan which is described below.

Transport 21: A 21st century transport plan for 21st century Ireland¹⁰

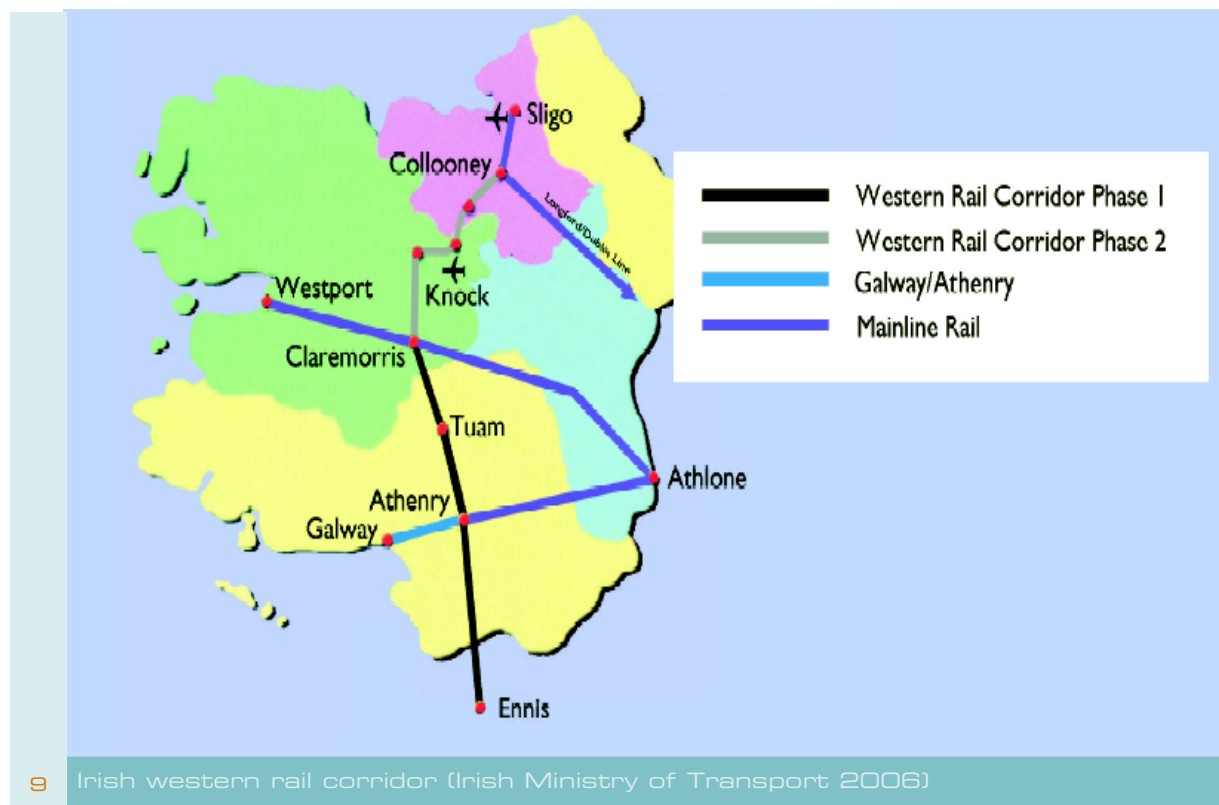
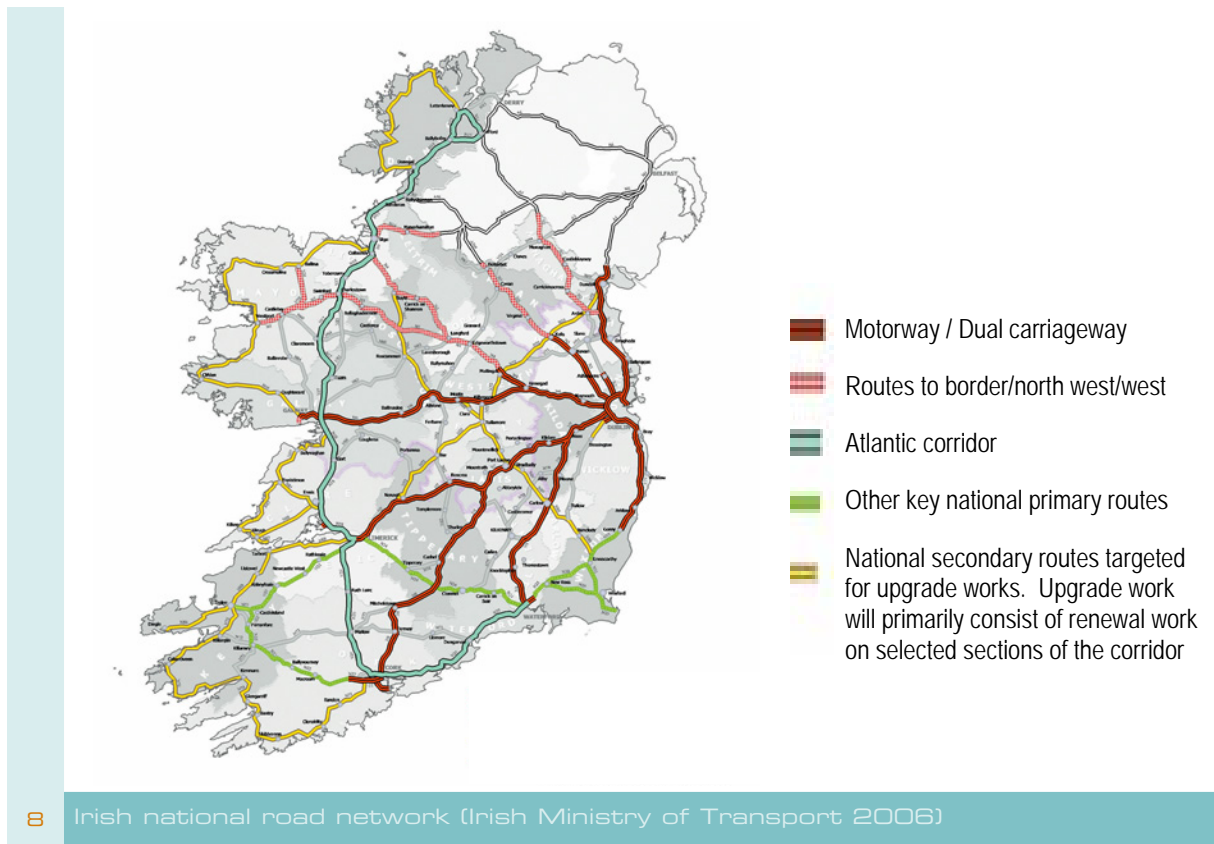
Transport 21 programmes a €34 billion (\$NZ 70 billion) investment in Ireland's transport system over the next ten years. €26 billion is funded from the Exchequer, and €8 billion from PPPs. €18 billion is to be spent on roads and €16 billion on public transport, mostly in Dublin. The greater Dublin area receives €14 billion of the total investment, with the remaining €20 billion committed to the wider national programme.

To put this into context of the current land transport programme, Land Transport NZ have forecast capital spending for roading and passenger transport at approximately \$NZ 11 billion over the next ten years.¹¹

In contrast to New Zealand a key difference is the integration of transport modes within the overall plan and the coordination of this plan within the overall spatial development plan for the country.

¹⁰ Transport Minister Martin Cullen at the launch of the Transport 21 plan Nov 2005 see <http://www.transport.ie/viewitem.asp?id=7048&lang=ENG&loc=1850>

¹¹ <http://www.ltsa.govt.nz/funding/nlt/publications.html>



way linking Dublin with each of the gateway cities to the west and a new 2+1 road route connecting Donegal, to Galway, Limerick, Cork and Waterford, known as the Atlantic Corridor. See Figures 8 & 9.

Figure 10 shows an integrated transport system is planned for Dublin, to include seven new Luas (light rail) projects, two Metro lines, a centrally located underground station at St. Stephen's Green, integrating all transport services and the Western Rail Corridor.

Transport 21 also includes new commuter rail services for Cork City and Galway City, DART extensions in Dublin, 850km of dual carriage



I Infrastructure planning in Australian states

Each of the Australian states has developed their own infrastructure development plans:

- > Building One Victoria 2005-2010
- > New South Wales State Infrastructure Strategy 2006-2016
- > South-East Queensland Infrastructure Plan and Programme 2005-2026

South-East Queensland Infrastructure Plan & Programme

The most advanced of these State plans is the South-East Queensland Infrastructure Plan and Programme 2005-2026 first published in April 2005.¹²

South East Queensland is experiencing the fastest growth rate of any urban region in Australia. By 2026 the population is expected to reach around 3.7 million people – an increase of more than one million.

The plan has three distinct phases:

- > **Phase 1: 2005/06 – 2008/09**
Provides forward estimates of the State Budget, and shows specific commitments to funding for nominated projects
- > **Phase 2: 2009/10 – 2015/16**
Commits infrastructure investments for this period
- > **Phase 3: 2016/17 – 2025/26**
Includes infrastructure, that is likely to be

required in the longer term, which will need to be considered in future infrastructure plans

Notable features include:

- > Recognition of the need to provide certainty on infrastructure development to enable forward planning, capacity building and innovative project delivery. Consequently a detailed 20-year program of infrastructure projects with a 10-year budget commitment is provided
- > Acknowledgement of the principle that strategically-focused infrastructure investment will help lead and support development and achieve key policy outcomes. The plan specifically recognises that in some instances this means implementation ahead of existing need. It also emphasises the importance of reserving and protecting strategic corridors for future transport needs
- > Provision for alternative funding such as higher levels of borrowing together with private sector involvement through PPPs¹³
- > Provision for annual updates and reviews including coordination of state and local government agencies

Building One Victoria

"Throughout metropolitan Melbourne and country Victoria, hundreds of new projects are laying the foundations for future opportunity, wellbeing and prosperity for all Victorians"

➤ Hon. Steve Bracks, Premier

¹² A copy of the latest plan can be downloaded from <http://www.oum.qld.gov.au/?id=359>

¹³ A list of Australian PPP projects is included in the Appendices.

Like Ireland's National Development Plan, *Building One Victoria* released in June 2005 aggressively promotes infrastructure development to drive social and economic growth. The plan is managed and supported by a Ministry of Major Projects and the Victorian Department of Infrastructure. Both departments are responsible and accountable for implementation of the programme.

Melbourne in particular has undertaken extensive infrastructural development in recent years and made extensive use of PPPs to help drive the development.

New South Wales State Infrastructure Strategy 2006-2016

The New South Wales State Infrastructure Strategy has been produced as a whole of government process. It is led by the NSW Treasury and is designed to meet the growing demand for infrastructure, which is expected to remain at very high levels over the next decade.

Prior to the inception of the strategy, the State's infrastructure spending was mapped out portfolio by portfolio as part of the 4 year projections contained in each year's State Budget. The Strategy takes a different approach, providing a 10 year plan which links the 4 year budget cycle and the 25 year regional plans, the first of which, the Sydney Metropolitan Strategy, was launched in December 2005.

The integrated nature of the Strategy is intended to allow the private sector, public sector agencies, local authorities and the wider community to make decisions based on the State Government's priorities and timing for major infrastructure projects.

An important aspect is the broad funding requirement it maps out to finance the State's infrastructure goals. Over the life of the

strategy, the New South Wales Government will increase infrastructure funding by an average of around 4.6 per cent a year, or more than \$110 billion over the next decade. That funding will rely principally on budget funding and increased borrowing. PPPs will be used where appropriate.

↘ Environmental PART D planning

The length of time projects take to go through the planning and consenting process, the complexity of the process, and the impact delays can have on infrastructure projects is a major issue in New Zealand. It is also an issue that is faced, but is being addressed, in the United Kingdom, Ireland and Australia.

Ireland

In Ireland the Environmental Protection Agency (EPA) is responsible for protecting the environment. It is a statutory body funded by the Department of the Environment. Its mission is to protect and improve the environment taking into account the environmental, social and economic principles of sustainable development. It licences and controls large scale waste and industrial activities, oversees local authority environmental protection responsibilities, is responsible for compliance and assesses the impact of proposed major developments on Ireland's environment.¹⁴

The Irish counties themselves have responsibility for the environmental services in their particular areas. These are primarily community services, certain waste and water services, and planning. If building or construction is required an application is made to the relevant local authority, with there being a right of appeal to An Bord Pleanála (the National Appeal Board in Ireland for planning applications). There are also appeal rights to the Irish Courts, but only on procedural matters.

The Irish also have to address the complex issue of old Viking archaeological sites, which

may be historically important, but which have the potential to hold up projects for significant periods of time.

Streamlining approvals for strategic infrastructure

To overcome the delays being encountered for obtaining planning approval and to streamline the consent framework for infrastructure of public importance (defined as projects of strategic, economic or social importance, which contribute to national or regional strategies) the Irish Government introduced the Planning and Development Strategic Infrastructure Bill 2006.¹⁵ The Bill provides for the establishment of a new Strategic Infrastructure Division of An Bord Pleanála which will provide a one-step consent process (with provision for consultation with the decision makers) for energy, transport, waste and water infrastructure projects. This will allow projects to go straight to the Planning Board, rather than first having to get local authority approval, thus reducing the length of time it takes to get development consent/planning permission.

The process for judicial review applications and appeals is also being reviewed to try and reduce the time delays associated with judicial review challenges. To improve the process it is proposed that there be a designated Planning Judicial Review Division in the High Court, or at least a designated Judge to hear such cases. Other proposed amendments to the process include such matters as leave being required before an application can be brought, a "substantial" ground having to be relied on, the possibility of an undertaking as to damages being required, the outcome of the application being final (unless there is a matter of exceptional public importance), and the requirement to deal with matters expeditiously.

¹⁴ www.epa.ie

¹⁵ As of August 2006 the Bill was in its final stages of enactment. Details available at: <http://www.oireachtas.ie/viewdoc.asp?DocID=4946>

I New South Wales

In New South Wales planning reforms (the Major Projects State Environmental Planning Policy (SEPP)) have been passed to improve the assessment of major projects. The purpose of the reforms, which were passed in 2005, is to remove unnecessary red tape and clarify the assessment of major or significant projects. A project's significance may be due to its economic importance to the State, its potential environmental impact, strategic location or because it will provide essential infrastructure. The legislation also replaces approvals under eight Acts with a single integrated assessment and approval process.¹⁶

Planning and assessment responsibilities are dealt with by local authorities in areas where the State planning objectives have been achieved. However, this was not deemed as appropriate for major projects. Previously the NSW Planning Minister had the power to "call-in" development applications from local authorities. One of the major aims of the Major Projects SEPP is to consolidate major projects under one instrument and make the Minister the determining authority. The intention is to make it easier for proponents, the community, and interest groups to understand the regime for these projects and to facilitate the speedy and effective delivery of infrastructure. In addition to major projects the legislation provides the Minister with the power to declare a project as "critical infrastructure" if it is essential to the State for economic, environmental or social reasons. Special provisions apply in respect of such critical infrastructure.

There are two ways that a major project can be undertaken in New South Wales. One is to lodge a project application that contains

detailed information about the project. Another is to submit a concept plan which provides a broader overview of what is proposed. Approval of the concept plan establishes the framework for a more detailed development of the proposal, which may include the need for further approvals.

With regard to the project application, the proponent must prepare an environmental assessment of the proposal. Under the new regime the Department of Planning in New South Wales prepares and makes available the key issues that the proponent must address. State agencies, local authorities and other relevant authorities are consulted in developing these requirements. The proponent is also encouraged to consult with the community. Usually there must be a written statement of commitments outlining how the projects likely environmental impacts will be minimised or managed. Once the proponent prepares the environmental assessment it is checked that it addresses the necessary requirements and, if satisfactory, the Department will arrange for it to go for public comment for a minimum of 30 days. Under the new laws, the proponent can be required to respond in writing to any issues raised and outline any proposed changes to minimise its environmental impact. The matter then goes to the Minister.

As part of the planning reforms, provisions have also been made for the use of Independent Hearings and Assessment Panels (IHAPs) to strengthen (and shorten) the assessment process. The Minister can decide to convene an IHAP and appoint panel members to assess a project at any stage in the assessment process to provide advice on issues of concern. Public hearings may also be undertaken to provide input into the panel's assessment if the IHAP considers it appropriate. The IHAP then produces a report

¹⁶ .An excellent guide on the situation in NSW is set out in the NSW Government, Department of Planning Community Guide on NSW Major Projects Assessment, March 2006. See also the website at www.planning.nsw.gov.au. SEPP can be found at www.legislation.nsw.gov.au

outlining the issues and making recommendations.

Both proponents and objectors can appeal the Minister's decisions in certain *limited* circumstances. A proponent of a major project who is dissatisfied with the determination of the Minister can within 3 months appeal to the Land and Environment Court. Objectors may also have appeal rights. Any appeal by them must be commenced within 28 days of the notice of determination being issued. Objectors do not have a right of appeal where a concept plan has been approved. Proponent and objector appeals cannot be pursued where projects have been subject of a report prepared by a panel of experts, or where the project has been declared critical infrastructure.

| Victoria

In Victoria, the Environmental Protection Agency (EPA) is the regulatory agency.¹⁷ The EPA has identified the need to get involved in projects as early as possible during the planning phase and to identify requirements that need to be addressed up front.

Environmental effects statements are prepared by proponents for projects under the Victorian Environmental Effects Act. Community consultation occurs during the preparation of the statement. Local government and the EPA are also heavily involved in the environmental effects process. The environmental effects statement is assessed by an independent panel. A report is prepared which goes to the Minister for the Environment who either accepts or rejects the proposal. There are limited rights of appeal.

The Victorian Government has also identified the need for specific legislation. Such legislation was used for Citilink (the link between Melbourne Airport and the City). It is

also being used for the Eastlink Project in Melbourne. This project is described in more detail in a later section of this report. The legislation for the project is aimed at streamlining the planning process rather than overriding it. One of its aims is to provide the best tailored mechanism for managing risks. Specific legislation is also proposed for the Channel Deepening Project with the Port of Melbourne.

| New Zealand

The Resource Management Act 1991(RMA) is the main environmental statute in New Zealand and governs in particular the designation process, which is integral to major infrastructure. Since its implementation a number of issues have been raised with the consenting process. In 2004 the Labour Government announced a review of the RMA focussing on ways to improve the quality of decision making at local authority level and to provide central government with a greater range of options to assist local authorities on nationally significant projects.

Before the amendments, which came into force in August 2005, the Minister for the Environment could call in an application for a resource consent which was nationally significant. However, the power was seldom used. The RMA required the Minister to appoint a Board of Inquiry to hold a hearing and then make recommendations to the Minister. The Minister rather than the relevant local authorities determined the application.

Under the amended RMA, an applicant or local authority can request the Minister to intervene in a matter of national significance. The intervention power has been broadened to apply not only to resource consents, but also designations and private plan changes. The Minister can choose from a variety of options in these circumstances:

¹⁷ See: www.epavic.gov.au

- > Providing information about the national interest through a Crown submission
- > Funding an independent coordinator to ensure the processes are run effectively
- > Directing an application be heard jointly if more than one local authority must give consent
- > Appointing a person to the hearing panel

The new amendments also retain the option for the Minister to call in the application. When deciding whether or not to call in, the Minister must take into account whether:

- > The matter is of national significance
- > The local authorities who would process and decide the application have capacity to do so
- > The other powers (set out in the previous paragraph) would be appropriate

Once a matter has been called in, the Minister can either refer it to a Board of Inquiry or to the Environment Court. The Board of Inquiry now makes the final decision on the application (rather than the Minister). There are appeals from a Board decision only on a point of law. In other words there is no appeal to the Environment Court where all issues can be re-litigated.

A long row to hoe

It remains to be seen whether these expanded powers will be used more often by the Minister and to what extent Transit New Zealand and other authorities request the Minister to call in major infrastructure projects.

Regardless of which route is followed, the number of RMA approvals will still be a significant factor in infrastructure projects and

will include as a minimum a designation, resource consents (from both territorial and regional authorities if the matter is not called in) and lodgement of an outline plan. For a major roading project, for example, the applicant will need to prepare a detailed options analysis, a specimen design, and a detailed assessment of environmental effects. The process for securing approvals will also continue to involve consultation with public, iwi and affected parties.

In addition, land acquisition procedures via the Public Works Act 1981 (where agreement with the land owner cannot be reached) can also add significantly to delays in implementing large projects. There is currently a comprehensive review of the Public Works Act in progress.

There is also other legislation that can hold up the delivery of a project. In addition to the RMA and Public Works Act regard may have to be had to such legislation as the Land Transport Management Act, Local Government Act, Historic Places Act, Reserves Act, Foreshore and Seabed Act, Reserves and Other Land Disposal and Public Bodies Empowering Act.

Another problem is the fragmentation of projects. For example the Western Ring Route comprises seven separate projects and the Waikato Expressway has been planned in seven stages. This leads to delays and additional cost as each stage has to go through the planning process.

New Zealand has been a leader in environmental issues. However, it needs to ensure that the consenting process for infrastructure projects does not remain too cumbersome, difficult and expensive. A streamlined consenting process which provides for consideration of national needs is important for projects of national importance. Based on lessons learned from overseas jurisdictions, consideration needs to be given



to one or more of the following:

- > The development of new legislation specific to projects of national importance or amendments to the Resource Management Act (RMA) to allow for it
- > Project consolidation—especially for contiguous transport projects (eg: Waikato Expressway and Auckland's Western Ring Route)
- > Better use being made of the call in process under the RMA
- > Further streamlining the Environment Court process along the lines set out in the Irish Planning and Development (Strategic Infrastructure) Bill
- > Improvements of the designation process, including direct reference to the Environmental Court for major projects
- > Adoption of outline or concept planning approvals

Procurement options

PART E

The traditional procurement model adopted in New Zealand of the public authority having a consultancy agreement with an engineer or architect, a construction contract with a contractor, and financing contract with a bank (or financier) (if required), is the most used model in Ireland, the United Kingdom, Australia and New Zealand. These contracts are largely based on separate parties having separate responsibilities, with the public authority usually taking over responsibility for the operation and maintenance of the infrastructure or awarding a separate contract for it.

However, other procurement options are becoming more widespread and reflect the advantages that can occur if one party takes on the responsibility (and risk) for a number of tasks.

| Design build & design build maintain

Design and Build contracts are becoming more prevalent. These contracts require the contractor to design and build the contract works. They usually require the novation (or transfer) of the principal's design and build consultants to the contractor at the time of signing of the contract, or the contractor to enter into new contracts with these parties. Design, Build, and Operate or Maintain contracts (DBOs/DBMs) are also becoming more prevalent. These contracts reflect the importance of recognising the whole of life costs of a project including both the upfront capital contribution and the benefits of a long term maintenance contract.

| Guaranteed maximum price contracts

Another procurement method that is used is the GMP or Guaranteed Maximum Price Contract. This contract requires the contractor to give a guaranteed maximum price for the contract works, thereby providing the principal with greater cost certainty. GMP contracts transfer the cost of that price changing to the contractor, while seeking to preserve the sharing of any cost savings for the principal. A target cost is set to which the actual cost of completing the project is compared. If the actual cost is below the target cost the principal and the contractor share in the saving. If the actual cost is above the target cost the contractor bears the additional cost. A key component of GMP contracts is the setting of the target cost and defining what it actually covers.

The setting of the target cost is also key to two other procurement models – the alliancing contract and collaborative working arrangements.

| Alliance contracts

In an alliance contract all the participants work co-operatively towards a shared goal, the successful completion of the project. This includes sharing the risks and rewards of completing the project on time and on budget, and having an open approach towards costs, all to achieve a common goal. An alliance contract requires the participants to create among themselves an entity, which may be a corporate entity. This entity will organise the carrying out and completion of the project for the various alliance members, who agree among themselves on a target cost and other key performance indicators. Examples of alliancing contracts in the New Zealand context include the Freeflow Alliance (the Grafton Gully Project), ALPURT B2 and what would have been Project Aqua.

I Collaborative working arrangements

Collaborative working arrangements are similar to alliance contracts. They also focus on the contracting parties working together in a joint team to explore ways of delivering the project to all parties mutual advantage. As with alliancing contracts there is a single suite of risk/reward mechanisms in which all parties share in the gains and pains of a project.

Alliance projects and collaborative working arrangements have had success in achieving cost reductions by focusing on risk sharing rather than risk transfer. This constitutes a major departure from traditional contracting models. Alliancing projects and collaborative working arrangements are commonly used where there are a number of uncertainties and when it is difficult to provide certain specifications.

I Public finance public risk

All of the above procurement methods rely on the financing of the project to be provided by the public procurement authority, through equity and/or debt funding. It is the public sector also transferring the financing aspect of a project to the private sector (Design Build Finance Operate projects) that leads to PFI projects (discussed in the next section). In such projects it is the private sector that provides equity and debt to finance the construction of the asset. This option is being used in about 10 – 15% of infrastructure projects in Ireland the United Kingdom and various parts of Australia (mainly Victoria and New South Wales).

In New Zealand it is the transfer of the financing aspect of public infrastructure projects to the private sector that has yet to occur. Except in limited circumstances financing of projects by the public sector is

primarily through taxes/charges and rates (both targeted and general) at a local authority level. Other sources of local authority income include development contributions and subsidies, or public sector borrowings from financial institutions or the public.

Tolling

There are limited instances of tolling. However, tolling is only being used or examined in relation to public and not private sector borrowings.

One example where tolling is being used is in Tauranga on Route K which provides a southern western bypass of the city linking to the Port of Tauranga. The Tauranga City Council is the tolling authority.

Tolling is to be used to partly fund the SH1 Northern Motorway extension north of Auckland (ALPUR B2) and to enable the project to be delivered sooner than otherwise would have been possible. In relation to ALPUR B2 Transit New Zealand is the road controlling authority, the toll operator and the enforcement agency. It retains all operational responsibilities for the toll schemes and project risk (although it has tried to share risk through an alliance arrangement).

Tolling was also proposed for the Harbour Link project between Tauranga and Mt Maunganui, although a one off funding grant made by central government has removed the requirement to borrow to complete the project. Investigations are underway for the potential for tolling to be used to enable the earlier completion of the Western Ring Route in Auckland and the Waikato Expressway.

Risk transfer

Associated with the financing issue is the transfer of ownership and risk. Under traditional procurement methods the public

authority retains ownership of the asset and all associated risks, including the costs of ongoing maintenance, and in the case of a toll road, the risk that demand will not achieve expected levels..

In ALPURT B2, and the other projects being investigated, ownership of the road remains with Transit New Zealand. Under the PFI model ownership transfers to the private consortium, at least for the term of the concession period (typically 25-35 years) when ownership can transfer back to the public sector (i.e.: the so called BOOT, Build Own Operate and Transfer schemes).

Tauranga's Route K project is an example of the real cost associated with the public sector retaining key project risks in exchange for an apparently lower cost of finance. Council debt financed the project with debt repayment being funded from toll revenues. Debt financing provided an apparent advantage in that it attracted a lower rate of interest than a finance package; consisting of private sector debt and equity, with the financiers accepting the risk of project revenues not reaching predicted levels. In this case, actual toll revenue has not matched projected revenue and the shortfall has had to be met by ratepayers. As of June 2005, toll revenues represented only \$1.3m (34%) of the \$3.8m total cost of service. The consequential loss of \$2.5m represents a negative 5.6% annual return on the original construction cost of \$44.7m. As such, Route K clearly illustrates the potential value of a higher cost of finance in exchange for the mitigation of a key project risk to the public sector.

However, the fact that the project is a net cost to rate payers doesn't mean the toll project is a failure. Had it been procured in the traditional sense, without tolling, most of the costs of the project would have still been funded by rate payers. Although the cost of collection of tolls is relatively high at 44% of revenue, toll revenues nevertheless exceed the cost of collection by approximately \$700,000 per

annum. This is revenue that otherwise would not be available to offset project costs. Moreover, the overall social and economic benefits of the project must be valued against the costs in order to judge the overall benefits of advancing this project assisted by toll funded debt.

I Choosing the best procurement method

Overall, the appropriate procurement structure for a project is that which provides the best value for money for the project. Value for money is a concept embracing efficiency, effectiveness and economy rather than just least cost. The value for money drivers in different procurement structures are:

- > An appropriate association of risk between the parties
- > A procurement structure which optimises the whole of life costs over the life of the project
- > An output based specification, reducing the complexity and risk for the public sector procurer
- > Sufficient flexibility to allow for changes in service requirements over time, while providing sufficient certainty over what is required
- > Appropriate incentive structures for the private sector to deliver services in a timely and efficient manner
- > Risk management expertise through external due diligence or specialist risk management providers
- > A consideration of the costs of finance and the ability to access revenue to service debt

PART F Public Private Partnerships, Private Finance Initiatives & Private Finance Projects

What are Public Private Partnerships ?

Private Public Partnerships (PPPs) are contracted relationships between the public and private sector to produce an asset or deliver a service. Best practice will almost always involve the private sector in some form, whether in planning, design, construction, maintenance or (sometimes) in finance.

Types of project delivery structures used in PPPs include:

- > BOOT (Build Own Operate Transfer);
- > BOT (Build Operate Transfer);
- > BOO (Build Own Operate); and
- > DBFO (Design Build Finance Operate).

Figure 1 below, summarises the public service

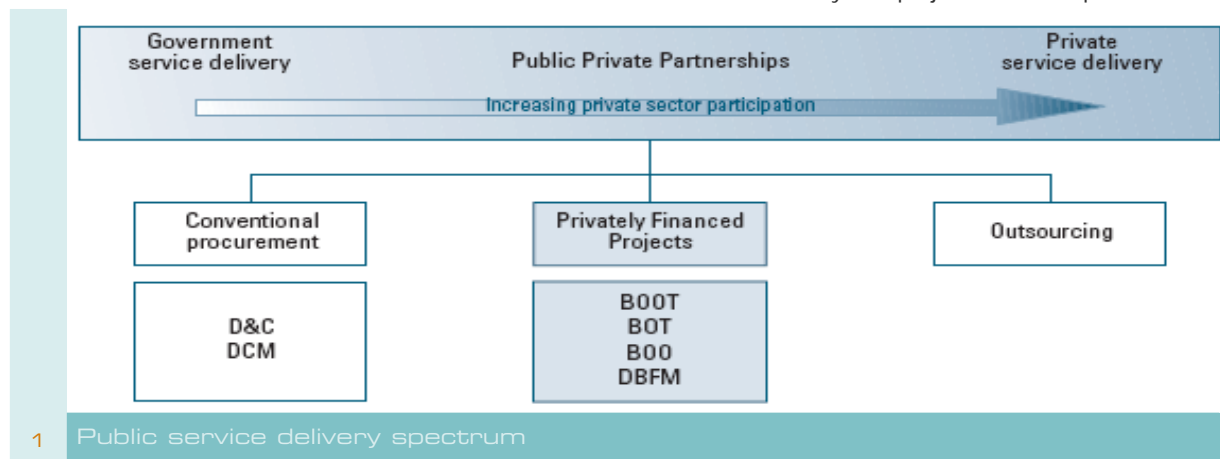
delivery spectrum.

Private Finance Projects (PFPs) and Private Finance Initiatives in the United Kingdom (PFIs) are a specific part of PPPs. PFIs involve the creation of an asset through private sector financing and a change in ownership control for a concession period. Often PPPs and PFIs are confused. When people talk about PPPs they are usually talking about PFIs.

As explained, in the PFI model the private sector is responsible for the financing of the project. The government's involvement may be through the contribution of land, capital works, risk sharing, revenue diversion or purchase of the agreed services.

PFIs cover economic and social infrastructure, and typically both a capital component and an ongoing service delivery or maintenance component. The projects are complex, involve high capital costs, lengthy contract periods that create long term obligations, and a sharing of risks between the public and private sectors. In determining whether to undertake a PFI project one needs to look at whether a project adds value for money. In determining this, an examination is taken of the whole of life costs of the project.

PFIs have now delivered over 500 operational projects in the United Kingdom, and make up about 15% of infrastructure investment. There are currently 200 projects with a capital value



of £26b in the procurement pipeline to 2010.

I Types of projects

PFI projects have been used in a variety of areas.

Roads

There have been a number of major capital projects. Examples which will be known to New Zealanders are the City Link project in Melbourne and numerous Sydney toll roads. There have also been a number of long term road maintenance schemes. In the United Kingdom there have been 43 transport projects.

Rail

This includes light rail. Light rail projects have a very large capital cost. The experience in the United Kingdom is that a lot of time and effort is required in investigating such issues as the rail corridor, passenger volumes, the impact of population changes over time and how you deal with demand risk before embarking on a project.

Energy

Examples include major wind farm projects.

Water

Examples include the Sydney water projects.

Waste

Waste projects are being investigated in Ireland. They raise particular issues in relation to environmental consenting issues, but are still seen as appropriate for PFI projects. In Victoria eight local authorities have banded together to look at waste projects.

Schools

In the United Kingdom there have been

numerous projects, including 230 new or refurbished schools. The total spent in the education field exceeds £4.1 billion.

Hospitals & health

In the United Kingdom there have been 185 new or refurbished health facilities and a total capital investment of £6b.

Accommodation

This includes office accommodation, leisure centres, courts and prisons. In the United Kingdom over £4b has been spent on such projects.

Defence

These projects have been very popular in the United Kingdom and Australia. In the United Kingdom there have been about 50 projects totalling over £4.5b.

Street lighting

These projects are a good example of the bundling of projects.

Housing

In the United Kingdom about £750m has been spent on housing projects.

Social infrastructure

Concern is often expressed about private sector involvement in the social infrastructure area (for example schools and hospitals). In this area the government still delivers the core services (for example teaching services in education and clinical services in health), while the private sector builds, maintains and operates the asset. Those interviewed by us advised that such projects had been a great success, allowing teachers to teach rather than spend their time as building managers. Likewise they allow doctors and administrators to spend their time on health services.

I Benefits, problems & opportunities

There has been a lot of discussion in New Zealand around the advantages and disadvantages of PFI projects, which are still viewed with a degree of caution or cynicism.

In March 2006 Dieter Katz from Treasury released a paper on "Financing Infrastructure Projects: Public Private Partnerships" which concluded that PPPs are worthwhile only if all three of the following conditions are met:¹⁸

- > The public agency is able to specify outcomes in service level terms, thereby leaving scope for the PPP consortium to innovate and optimize
- > The public agency is able to specify outcomes in a way that performance can be measured objectively and rewards and sanctions applied
- > The public agency's desired outcomes are likely to be durable, given the length of the contract

While seeing merit in the PPP model in certain circumstances, the paper argued that:

- > There are other ways of obtaining private sector finance without having to enter into a PPP
- > Most of the advantages of private sector construction and management can also be obtained from conventional procurement methods (under which the project is financed by the government, and construction and operation are contracted out separately)
- > The advantages of PPPs must be weighed against the contractual complexities and

rigidities they entail. These are avoided by the periodic competitive re-tendering that is possible under conventional procurement

This section examines some of these issues and addresses the arguments raised for and against PFIs. In the process of doing this it sets out the lessons New Zealand can learn from the United Kingdom, Ireland and Australia if it embarks on any PFI Projects.

Cost & complexity

One of the main arguments raised against the PFI process is its cost and complexity. For both the public and private sector to go through the expression of interest, request for tender and negotiation stages is laborious and expensive. Because of the costs involved minimum thresholds for the size and cost of projects have been set (although size and cost should not be the sole determinants). In the United Kingdom the minimum value of projects is about £20m. In Ireland it is about €20m. In New South Wales the minimum size of projects A\$80-100m. All of these jurisdictions have recognised that the size of projects can be reduced in the social infrastructure area, particularly if similar projects are bundled.

Due diligence process

High costs arise because of the rigour of the due diligence process that is undertaken by the public and private sector using legal, technical and financial advisors. While the length and cost of the due diligence process is high (meaning PFIs are not suitable for all projects) the experience has been that it does contribute to the overall value for money for the PFI and may lead to a shortening of construction times. It also allows for the earlier identification of risks. For example, it would have been interesting to see whether or not the Tauranga Route K project would have

¹⁸ The Report is available at <http://www.treasury.govt.nz/workingpapers/2006/pp06-02.asp>

proceeded if it had been put to the market. If PFIs are to be used in New Zealand then the implementation time of such projects will (at least initially) be longer than traditional procurement approaches while New Zealanders become familiar with the process and how it works

However, many economic projects are currently not proceeding in the New Zealand context due to the lack of available funding. When discussing costs, the cost of deferring a project (both social and economic) must also be considered.

Inflexible contracts or long term certainty

There are concerns about the risk of being locked into an inflexible long-term contractual arrangement with only one opportunity to negotiate a contract of 35 years or more. Where required, flexibility can be provided through the concession and contractual terms that are negotiated between the parties.

Under PFI, the length of the contract provides the public procurement authority with certainty of maintenance and operation for the length of the concession at a known contract price. On the other hand continual competitive re-tendering under the traditional procurement approach incurs costs such as administrative overhead and bidding costs. Moreover, costs can go up as well as down. The current trend is for increased, not decreased, cost of maintenance. The rising cost of maintenance is one of the key reasons for the current pressure on budgets. Within a PFI contract this risk is transferred to the private sector.

Impact on public policy initiatives such as road pricing

In New Zealand, public officials have expressed reticence that commitment to a long term PFI contract might inhibit the Crown's

ability to subsequently introduce congestion charging some time in the future. However, this need not be the case. On the one hand introduction of charging on "free" routes is likely to enhance traffic volumes on adjacent toll routes and could be a valued addition supported by the private consortia. Moreover, if the public sector wishes to retain the ability to set toll charges, it has only to include such provisions with the contract at the outset. In such circumstances, the consortia can be paid on the basis of service availability enabling the public sector the right to manage the toll levels as they see fit. Availability service payments and shadow tolling are the most commonly used form of roading PFI in the United Kingdom. Direct user pay tolls have only been used to date on the Birmingham M6.

Need for certainty of requirements

If PFIs are to be used it is essential that the due diligence process is carefully managed. The experiences encountered have been that the costs are higher if the process is uncertain. Particular problems have arisen both with time and cost if the public sector does not clearly set out its requirements or does not know from the outset what it wishes to achieve. If parameters change, costs increase. Usually one of the key benefits of PFIs is that they require the public sector to define more accurately their requirements through an output based specification, and to consider and provide for mechanisms for changes to these requirements over time. Often this is a discipline that does not exist to the same extent with other conventional procurement models, although these models would benefit from this exercise being undertaken.

Use of standard contract conditions

The complexities and costs of the process can be reduced through the use of standard contract conditions, which clearly articulate the

defined risk transfer, and which can be modified where appropriate.¹⁹

In the United Kingdom each sector creates its own specific modifications to the standard provided by Treasury. In Ireland the National Development Finance Agency has responded to concerns in respect of the time, cost and resources expended in the bidding process by commissioning a Template Project Agreement, specifically focused on particular sectors. In Australia the main states are sharing information on contract conditions. All are aimed at certainty and uniformity wherever possible. If PFIs are to be used in New Zealand it is important that the public sector adopts the approach of using standard contract conditions.

Due diligence adds value

While the cost of the process is high, there are benefits in undertaking a detailed due diligence process as it helps ensure that all issues are examined and addressed up front. The experience in the United Kingdom, Ireland and Australia is that as a result of the use of PFIs this due diligence process is finding its way into standard procurement processes. Anecdotal evidence received from those visited is that projects not undertaken by PFIs gain from the rigour of the due diligence process resulting in improved performance in relation to standard contracts.

In New Zealand the view has been expressed that our contracting processes are competitive and adequate. This may be so, although a definitive statement cannot be made as there has not been a real benchmark to measure

such projects against. In addition it is possible that the projects could be improved even further. PFIs are not appropriate for all projects and there is clearly the need to use some of the guidelines referred to in this paper to carefully choose PFI projects. However, this does not mean that the due diligence process (or at least some of it) cannot be used on such projects.

Size of project required

Associated with the size of projects is concern over whether in New Zealand there will be enough of a competitive bidding process because of the size of PFI project required. This has not proven to be a problem in Ireland (although it is on the doorstep of Europe) or in Australia (although it has a bigger market). It is also unlikely to be a problem in New Zealand. New Zealand has a number of projects of sufficient size that fit within the PFI model. Examples include Central Motorway Junction, the Waikato Expressway, ALPURT B2, Auckland Western Ring Route and a second harbour crossing. There has been sufficient interest for a competitive tendering process for these projects under the traditional and alliance contract models, and nothing to suggest that this would not be the case with PFI projects. Major financiers and construction companies are likely to be interested if the right political and legislative environment for PFI projects exists.

Capacity issues

Another issue that has been raised relates to capacity constraints in the construction industry. Capacity in all of the countries visited

¹⁹ See the following web sites for examples of standard conditions and guidance:

http://www.hm-treasury.gov.uk/documents/public_private_partnerships/key_documents/standardised_contracts/ppp_keydocsstand_index.cfm

http://www.hm-treasury.gov.uk/documents/public_private_partnerships/ppp_links.cfm

<http://www.partnershipsuk.org.uk/information/information-guidance.asp>

<http://www.4ps.co.uk/Home.aspx?pageID=7.0.2&ctl=Pubs&Type=Guidance>

<http://www.ppp.gov.ie/keydocs/guidance/>

<http://www.partnerships.vic.gov.au/CA25708500035EB6/0/C0005AB6099597C2CA2570F50006F3AA?OpenDocument>

<http://www.treasury.nsw.gov.au/wwwg/pfp-guidelines.htm>

has not been a major problem. The key issue with capacity has been the predictability of projects. If there is a predictable pipe line of projects planned, with guaranteed funding, construction companies can programme in projects, and have confirmed that they will bid for them.

Transfer of risk versus cost of financing & loss of control

An argument often advanced against PFI projects is that the public sector can borrow more cheaply than the private sector. Whilst a margin is paid for private sector finance, this argument ignores the offsetting transfer of risk taken on by the private sector and the cost that should be attributed to it. In conventional contracts the government/local authority takes on a number of risks, which (under PFI contracts) can be transferred to the private sector.

Similar issues arise with concerns over the transfer of control from the public to the private sector. While there is a transfer of control there is, once again, a transfer of risk. Moreover, good output specifications means the public sector essentially controls the service received even if ownership of the asset remains in private sector control for the term of the concession.

Fear of private sector super profits

A further concern that is expressed is the "super profits" that the private sector can make from PFI projects. These can arise when the private sector refinances at a lower rate of interest once the projects risks have been able to be assessed in the light of actual experience. The traditional response to this is that this is the reward for the risk taken on by

the private sector - risk equals reward, and it is the private sector's funds that are put at risk rather than the public sector's. Further, in the United Kingdom refinancing clauses have been introduced into projects to prevent or limit super profits from being made, and if big gains can be made, to provide for them to be shared with the public sector on a 50/50 basis.

Opportunities for innovation

An advantage of PFIs is that they allow for innovation by the private sector, which leads to better designs, improved efficiencies and cost savings. However, the level of innovation is dependent on the consenting process and how it is managed. Innovation through the design process can be inhibited if a consent has to be in place before the public sector can go out to tender. The experience in the United Kingdom and Ireland has been that most innovation has been of a commercial nature. The United Kingdom has endeavoured to redress this problem through enabling "outline" consents (effectively a decision in principle to proceed with the project) which encourage design innovation. Similar approaches are applied in the Australian States. Unless radical changes are made to New Zealand's consenting process, which requires detailed design to gain consents, innovation is likely to continue to be suppressed.

Private Finance Initiatives speed up development

One of the main arguments put forward in favour of PFIs is that they allow for the development of infrastructure that might not have otherwise been undertaken. Those interviewed by us that were not, or were less, in favour of PFIs, explained that while they preferred public funding of infrastructure as opposed to tolling, they still preferred PFIs to no infrastructure being delivered.²⁰ This is important for local authorities, who have

²⁰ For example the Irish Automobile Association takes the view that "a toll road is certainly better than no road"

funding constraints and lack the expertise and experience in procuring, managing and maintaining complex infrastructure. PFI Projects also free up public sector funds and allow them to be used elsewhere.

Improved asset maintenance

Another benefit of PFI projects is that they address the important issue of maintaining the asset. Treasury in the United Kingdom, Ireland, New South Wales, Victoria and Queensland explained that under traditional design and construct contracts when finances are tight the maintenance and therefore the longevity of the government owned assets suffers. This is because finances are directed elsewhere. A major benefit of PFI Projects is that the public sector get a fully maintained project for the life of the asset, which adds to its life. Ongoing service delivery and maintenance is important. PFIs recognise this.

Failed projects

Reference is sometimes made to PFI Projects that have failed or have had a chequered history. Often there is only press about the problem contracts, such as the Sydney Cross City Tunnel. However, a number of conventional construction contracts have problems and there is often little reference to successful PFI Projects (for example Sydney's water and the extensive list of roading projects).

No service no payment

A core principle of PFIs is that if there is no service there is no payment. No payment is made until the contracted service is available. This has been demonstrated in the United Kingdom through the public financial difficulties of Jarvis Construction Limited, a large construction company which was undertaking a number of PFI projects. Under the PFI projects no payments were due by the

government until construction was completed and the project delivered. The risk of delivering the project lay with the construction consortium and its financiers who stepped in. Another example is the Spencer Street Station in Melbourne. Under a traditional procurement model significant payments would have been made by the government. There have also been instances of the principal subcontractor getting into difficulties. Once again the consequences of these difficulties had to be borne by the private sector.

Further, the PFI model allows for deductions to be made from service payments once the asset has been delivered if certain key performance indicators (KPIs) are not met. The evidence from the United Kingdom has been that the levying of such payment deductions for poor performance has been relatively low. However, when used it has led to improvements in the service being provided. Overall the United Kingdom evidence is that service providers are, in the main, delivering the contracted services on time, within budget and specification. A summary of experience from the United Kingdom, and case studies from Ireland and Australia is provided in a later section of this report.

It also needs to be recognised that in any major infrastructure project there is always a danger that private sector contractors may experience financial difficulties. This can happen in a conventionally funded project as with a PFI project. However, in a PFI project there are additional safeguards which make it better able to deal with contractor difficulties.

These include:

- > The due diligence process (where financial robustness is examined)
- > Payments withheld until delivery of the contracted service
- > Equity risk (investors can lose everything

and are incentivised to manage projects properly)

- > Tender step in rights
- > The government's right of termination if the PFI company fails to deliver

Balance sheet arguments

A balance sheet argument is sometimes put forward in favour of PFIs. The crux of the argument is that from an accounting standpoint the public authority is not purchasing an asset, so that the transaction does not appear on its balance sheet. However, if shadow tolls are used this argument is not available, because the accounting rules require the shadow toll to be shown as a liability on the balance sheet. In any event the balance sheet argument should not be used as a determining factor on whether to embark on a PFI project. Rather, the key driving factor should be a determination of whether PFI brings better value for money for the public sector.

I Projects best suited to the Private Finance Initiative model

Overall, the projects that are likely to have potential to provide value for money using the PFI delivery model have some or all of the following attributes:

Scale

It is important that the value of the project is sufficiently large to ensure procurement costs are not disproportionate. Consequently, major investment projects with a contract value of \$NZ50m or more may be required, although a number of smaller, similar projects can be bundled.

Duration

Long service delivery periods are usually required of up to 25 - 35 years or more.

Complexity

PFI projects are large complex projects.

Service or output focus

Clearly definable and measurable output specifications are needed that are suitable for meeting service delivery standards or KPIs.

Private sector expertise

The project requires private sector expertise.

Non core activities

The project is in a non core area. It deals with the delivery of an asset (such as a school) rather than the core activity (of teaching).

Costing

The project can be costed on a whole-life, long term basis.

High maintenance requirements

This is tied in with the whole of life costs and the value for money issue.

Risk transfer

The ability to transfer risk to the private sector.

Innovation opportunities

Stable technology and other aspects of the project are not susceptible to fast based changes.

Value for money

It must be recognised that PFIs are not the answer to infrastructure funding and procurement. PFIs are just one procurement route. The PFI procurement structure is unlikely to deliver value for money where the investment is small and the benefits of PFI do not justify the significant costs required during the PFI procurement process. For such projects other procurement procedures may be more appropriate.

The key to any PFI project is its ability to demonstrate value for money. The public sector needs to understand how the PFI is likely to add better value for money than other procurement routes. Those interviewed by us acknowledge that trying to measure whether a project will deliver value for money is difficult. Nevertheless the United Kingdom, Ireland and Australia have developed policy frameworks to evaluate the potential to achieve better value for money through a PFI model rather than through public sector procurement. This involves both a qualitative and quantitative assessment.²¹ New Zealand needs to follow the framework set by these countries if PFIs are to be properly assessed. Providing a single government agency or centre of expertise is important for this process.

I Legal Impediments

Can PFI projects be undertaken in New Zealand?

The Land Transport Management Act 2003 allows for the development of tolling schemes and concession agreements for the delivery and operation of new roading infrastructure under certain circumstances. A road tolling scheme can be established on Ministerial recommendation by Order in Council. However, the ability to seek a tolling order

relates only to a public sector roading agency for the purposes of a public road. There is no ability for a private sector party to seek its own tolling order. While in theory the private sector could initiate the process with support of a public sector sponsor, there are a number of conditions and requirements that must be met before a tolling order will be granted. While most, if not all, of the constraints are surmountable, their collective impact has suppressed private sector interest in PFIs in New Zealand. To date, no private sector toll road projects have been proposed since the passing of the Act in 2003. Some of the reasons for this are described below.

Consenting and approval

From a private sector perspective the consenting and approval process by which a concession agreement for a toll scheme can be granted is onerous, expensive and uncertain. For example, a road project must first demonstrate through a consultative process that it meets the wide ranging objectives of the Land Transport Management Act. A further tier of consultation may be required under the LTMA if the road is to be tolled. A parallel process may also be required to meet the RMA requirements. Each tier of consultation increases the cost of getting a project off the ground, and the risk that it will not proceed.

Overriding this is a significant amount of discretion in the Minister who can impose whatever conditions he or she sees fit. These conditions must be satisfied before a concession agreement can be signed. In the absence of a clear understanding of what conditions could be imposed there is excessive risk for the private sector to invest significant time and funds.

²¹ In the United Kingdom the Value for Money Assessment Guidance was published in August 2004 and is available at http://www.hm-treasury.gov.uk/documents/public_private_partnerships/key_documents/ppp_keydocs_vfm.cfm

Inability to toll existing infrastructure

The inability to toll existing infrastructure is a potential problem given that New Zealand's strategic roading network is constructed on a piecemeal basis as and when funding becomes available. This makes it difficult to toll a contiguous piece of infrastructure such as State Highway 20 in Auckland or the Waikato Expressway.

Concession agreement provisions

A concession agreement must not include any provision that provides a disincentive for a person to pursue other sustainable transport options. For the private sector to take on a PFI project it must be satisfied with the return it can make for the risks it takes. When traffic volumes are marginal it may be unwilling to accept the risk of a competing public sector transport alternative.

Alternative route provision

The need to provide a free alternative feasible route increases patronage risk and can undermine the viability of a project.

Public land ownership

The land must remain in public ownership. Although not a key factor, this may not be attractive from an accounting or tax perspective.

Other legislation

In the water and wastewater area the Local Government Act 2002 imposes restrictions. Section 136 of the Local Government Act deals with contracts relating to the provision of water services. It prevents a local government organisation from entering into contracts for the operation of a water service for a term of

longer than 15 years. It further provides that if a contract is entered into the local government organisation must retain control over matters relating to the pricing of water services, the management of those services and development of policy relating to those services.

The Corrections Act now makes it clear that only the Crown can enter into any contract for the management of a prison.

Overall, the current legislative framework puts in place disincentives to the development of PFI projects. Legislative change is needed if PFIs are to become viable in New Zealand and for this change to occur government buy in is required.

I Need for government support

In New Zealand the government is sending inconsistent messages regarding PPP/PFI projects. It appears that the government has no formal position. However, one is required.

The repeated comments received from Treasury, industry organisations and the private sector in all of the jurisdictions visited is that government support and clear political commitment is vital. Certainty from the government about PFI expenditure enables the private sector to plan and more economically bid for projects.

In the United Kingdom the Blair Government has been very supportive of PFI Projects and has provided the private sector with the confidence it needs to take on major projects. In 2003 it commissioned an Audit Office report, which showed projects coming in on time and under budget. It has also established a PFI Operational Taskforce – a small unit acting on behalf of Treasury to work with government, local authority and advisory bodies to provide proactive support on projects and operational

issues.

In Ireland PFI Projects have the support of the Prime Minister and the Minister of Finance. It is government policy in Ireland to encourage the use of PFIs in the provision of public infrastructure services. The National Economic and Social Council have concluded that they have the potential to play a pivotal role in supporting the accelerated delivery of strategic national infrastructure, yield long term value for money for the government and ensure quality public services.²²

Not only is there the need for government support, but also the need for a government sponsored organisation or centre of excellence. For example in New South Wales there is a Private Projects Branch of New South Wales Treasury to advise the government and government agencies, provide economic and financial expertise in assessing PFIs and to promote best practice. In Queensland, the Brisbane City Council (the largest Council in Australia) has put together a specialist major projects team to deal with PFI Projects. Partnerships UK and Partnerships Victoria are examples of specific agencies set up by respective governments to support their PFI programs and provide an interface to the private sector.

All of the organisations with whom we met also made the point that education is vital. The lesson from the United Kingdom, Ireland and Australia is that you need people with the skills to deliver projects, a predictable pipeline of projects and an ongoing commitment to infrastructure development. In Ireland there has been the establishment of the National Development Finance Agency's Centre of Excellence for PPPs. Melbourne University has a centre for infrastructure. Treasuries in both Victoria and NSW have a central area of

expertise. They are heavily involved in projects, but individual agencies run them. They are involved in preparing business cases and in helping with negotiations.²³

If PFI projects are to succeed in New Zealand they need the support of and central administration by government. Once this has been achieved community buy in can be obtained.

²² For a full version of Transport Minister Martin Cullen's speech at the launch of the Transport 21 Plan November 2005, see <http://www.transport.ie/viewitem.asp?id=7048&lang=ENG&loc=1850>

²³ Refer note 19 for web site references of the various agencies.

↙ Leveraging PART H private sector partnerships

The United Kingdom, Australia and increasingly Ireland have utilized the PPP model to boost their infrastructure development programmes. The most significant PFI market is undoubtedly the United Kingdom. This section provides an overview of the PFI market in the United Kingdom and the best practice identified to date based on the meetings held with HM Treasury.

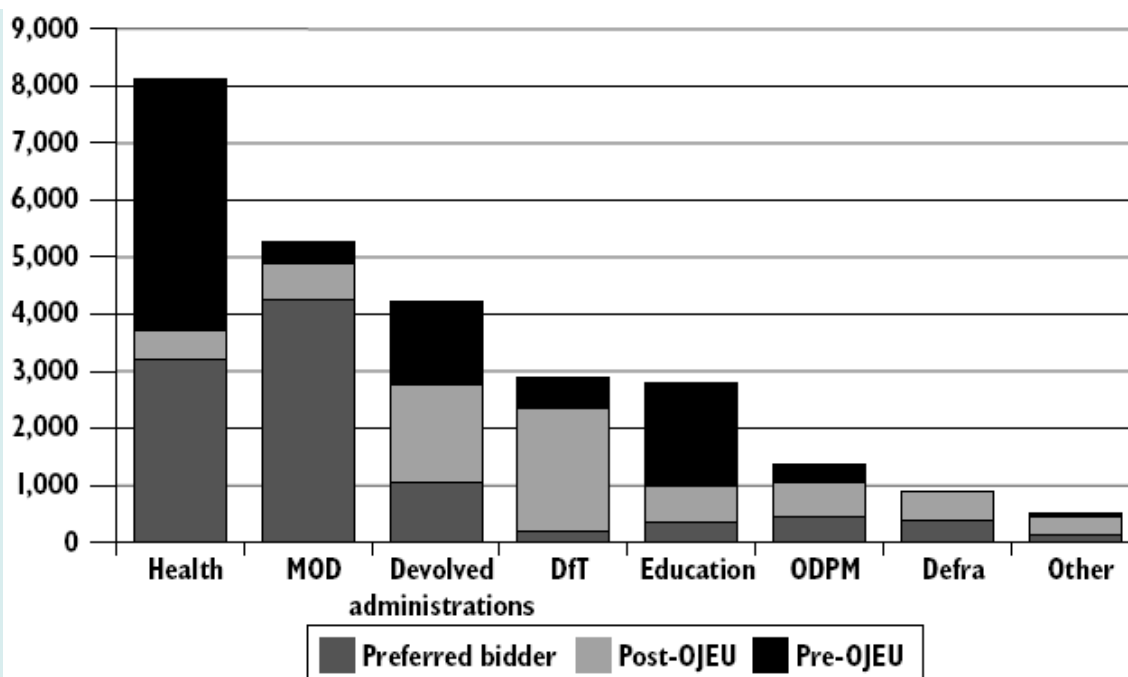
I United Kingdom

In the New Zealand context PPPs are most

often thought of in respect of toll roads. The reality is that in the United Kingdom only one toll road has been constructed, the Birmingham M6. The majority of roads are either shadow tolled (where the government pays the toll directly to the consortium based on traffic volumes) or service availability type contracts (where payment is made for providing service under an agreed set of KPIs).

Whilst the vast majority of public investment remains conventionally procured, PFI consistently makes up 10-15 per cent of public sector investment. As is explained earlier in this report, PFIs have now delivered over 500 operational projects in England, including:

- > 185 new or refurbished health facilities



1.1 UK Government deal pipeline to 2010 by department (Her Majesty's Treasury)²⁵

²⁴ An extensive range of information about the United Kingdom experience with PFI is available on the HM Treasury website:

http://www.hm-treasury.gov.uk/documents/public_private_partnerships/ppp_index.cfm

²⁵ Abbreviations used in the graphic: MOD: Ministry of Defence, DfT Dept for Transport, ODPM: Office of the Deputy Prime Minister, Defra: Department for Environment, Food and Rural Affairs, Pre and Post OJEU stands for publication in

- > 230 new or refurbished schools, and
- > 43 transport projects

There are currently around 200 projects with a capital value of £26 billion in the procurement pipeline to 2010 as illustrated in Figure 11. This represents one of the largest committed programmes of new investment in public service infrastructure through PPP and PFI projects globally.

Notwithstanding the reservations outlined by the New Zealand Treasury, discussed in Part F of this report, research undertaken by the National Audit Office and HM Treasury in Britain has shown that PFIs offer value for money for certain investments through a long-term focus on whole life costs, risk management expertise, and greater certainty for the public sector that services will be delivered to the specified standard. Benefits are derived from PFI where the risks associated with a project are borne by the party that can best manage them. PFIs record of delivery means that the British Government remains committed to using PFI as a procurement option where it is value for money to do so.

A 2003 HM Treasury report²⁶ found:

- > 89% of PFI projects were delivered on time or early
- > All PFI projects in the HM Treasury sample were delivered within public sector budgets. No PFI project was found where the unitary charge had changed following contract signature – other than where user requirements changed

- > 77% of public sector managers stated that their project was meeting their initial expectations

- > There is scope to reduce procurement times²⁶

Previous National Audit Office research has shown 70% of non PFI projects were late and 73% ran over budget.²⁷

In a continuing effort to refine best practice the Blair Government has introduced the following measures to strengthen the role which PFI plays in improving public services:

- > The “Value for Money Assessment Guidance” published in August 2004 has been introduced. It enables departments to maximise value for money from their investment programmes through the rigorous assessment of PFI compared with other procurement options. The government has adopted a similar approach to the investment programmes of local authorities through the reform of the PFI credits system²⁸
- > PFI is used where it is most appropriate and where value for money can be demonstrated based on clear criteria. To achieve this, the Government no longer uses PFI for new IT projects and small projects because PFIs do not represent value for money
- > Enforcement of the standard PFI contract to bring about a unified approach to risk transfer and to reduce procurement times and costs

²⁶p4, HM Treasury (2003) *PFI Meeting the Investment Challenge* See http://www.hm-treasury.gov.uk/media/648B2/PFI_604.pdf

²⁷p3, National Audit Office (2003) *PFI Construction Performance* See http://www.nao.org.uk/publications/nao_reports/02-03/0203371.pdf

²⁸ Under the PFI credit process local authorities are able to tender for central government funding (credits) for centrally approved PFI projects.

- > Enhanced use of strategic partnerships to coordinate procurement such as in the Building Schools for the Future (BSF) programme. It is now well established, with 12 projects currently in procurement which will modernise the country's stock of schools. The National Health Service LIFT initiative has delivered approaching £1 billion of investment in primary care infrastructure
- > Ensuring value for money in PFIs does not come at the expense of employees' terms and conditions. Departments have continued to retain the right not to transfer soft service employees to a PFI project and, where employees are transferred, they are protected through various employment provisions

Case studies

PART I

I Irish toll roads

It is commonly stated that while PPPs work successfully overseas, New Zealand doesn't have the scale of project to make the projects "bankable". This was one of the specific reasons for visiting Ireland and looking at its toll projects.

Of the €8 billion allocated for PPP projects in the Transport 21 Ten Year Plan, €6 billion is allocated to public transport projects and €2 billion to roading projects. Overall three PPP projects have been completed: (M50 Second West-Link Bridge, Dundalk Western By-pass and the Kilcock Kinnegad bypass); one is in construction and ahead of schedule (N8 Rathcormac/Fermoy By-Pass); and six are at various stages of planning and procurement.

Of these six projects, the Waterford City Bypass, the N7 Limerick Tunnel, the M3 Clonee/Kells motorway and phase 2 of the M50

upgrade are being targeted by the National Roads Authority (the Irish equivalent to Transit NZ) for a 2006 start. The National Roads Authority estimates that private investment in PPP projects amount to approximately €500m to date and that it will amount to approx €2bn over the period to 2010.

Case Study: M4/M6 Kinnegad to Kilcock Motorway

The M4/M6 Kinnegad to Kilcock Motorway pictured below was the first Irish road PPP contract. The Eurolink consortium were awarded a 30 year DBFO concession contract involving 34 kilometres of motorway with 4 kilometres of side roads, and 30 bridge structures. Construction was completed nearly one year ahead of schedule and the road opened to traffic in December 2005. Current traffic volumes are marginally ahead of expectation at between 16,000 and 18,000 vehicles per day. Toll charges are CPI linked at €2.50 per car in today's money for an estimated journey time saving of between 20



Kinnegad to Kilcock Motorway, Ireland

and 30 minutes.

Evaluation

The project is comparable with the New Zealand context in many ways. Traffic volumes equate to the levels experienced on State Highway 1 Auckland-Hamilton (18,000 vehicles per day (vpd)), and marginally more than SH2 Auckland Rangitara (to the Coromandel turn-off) which has an average of 13,000 vpd. It has a competing parallel road, the former national highway.

Despite these factors, all of which have been put forward as reasons why such projects “won’t work” in the NZ context, the road has been successful from Eurolink’s perspective. Feedback from both the NRA and Treasury officials was also positive.

A particular feature of the project was the extensive effort taken to protect the environment and archeology of the site including:

- > 72km of badger fencing
- > 40 mammal underpasses provided
- > 1.5km of river modified to maximise potential for wildlife
- > 250 lamprey and 350 crayfish captured and relocated to new habitat
- > Extensive bat surveys undertaken and 54 bat boxes were installed by a bat specialist
- > Over 40km of hedgerow inspected by a team of ecologists to ensure all nesting birds and surrounding vegetation were protected until the chicks had left the nest
- > Total of 31 archeological sites were uncovered researched and documented in advance of the construction programme

While manual tolling was selected as the main means of toll collection (in the light of comparatively low traffic volumes), the PPP agreement provides that:

- > Each automated toll collection express lane will allow unhindered passage of a vehicle with a valid transponder
- > For each direction of approach to a toll station, the average queue of vehicles calculated across all lanes will be no greater than 6 vehicles
- > The queue of vehicles waiting in any toll lane shall not exceed 12 vehicles at any time

A strict performance regime is provided for in the PPP contract to ensure compliance with these requirements. Defaults in performance lead to the imposition of a financial penalty, together with the award of points under a penalty points system, which may trigger increased levels of monitoring at the consortium’s cost, and ultimately contract termination. Overall, these provisions incentivise the operator to maintain a high level of service.

I Australian toll roads

Victoria and New South Wales have both made extensive use of Privately Financed Projects (PFPs) to help fund infrastructure development needs. Increasingly other States, such as Queensland, and the Commonwealth Government itself, are looking to take advantage of the approach. A list of committed and future projects is included in the appendices and a number of illustrative case studies are described below.

From 1998 to 2008 when Melbourne's Eastlink project will open, over 170 kilometres of urban motorway will have been constructed in Sydney and Melbourne utilising the Australian PFP model. This equates to the entire length of the motorway network in New Zealand. Also

of particular note is the compressed construction timeframes for major roading developments as compared with New Zealand. A list of the projects completed under this model is set out in Figure 12 below.

Eastlink

When it opens in 2008, EastLink²⁹ will provide 39 kilometres of highway between the Eastern and Frankston freeways, and major non-tolled bypasses of Melbourne's eastern and south-eastern suburbs. It is currently Australia's largest urban road infrastructure development.

EastLink is planned to reduce driving time between the city, its ports and some of Victoria's most important industrial areas. The new road is expected to be a catalyst for

Project	Length (km)	Value (A\$m)	Start	Finish
Sydney M4	12.5	246	1988	1992
Sydney M5	21.0	380	1988	1992
Sydney Harbour Tunnel	3.0	685	1988	1992
Sydney M2	20.0	644	1994	1997
Sydney Eastern Distributor	6.0	700	1997	1999
Sydney Cross City Tunnel	2.1	680	2000	2005
Sydney Westlink M7	40	1 500	2002	2006
Sydney Lane Cove Tunnel	3.6	1 100	2002	2007
Melbourne City Link	22.0	1 780	1996	2000
Melbourne Eastlink	40.0	2 500	2005	2008
Total	170.2	10 215		

12 Australian toll roads

²⁹ Links for further information including maps, illustrations, and video footage include: <http://www.seita.com.au/html2/home/home/index.htm> ; <http://www.partnerships.vic.gov.au/CA25708500035EB6/0/9EA8921D6BA57B6CCA2570DC001186B2> ; <http://www.connecteast.com.au/>

further commercial development.

The corridor is currently in the construction phase with the road expected to open in late 2008

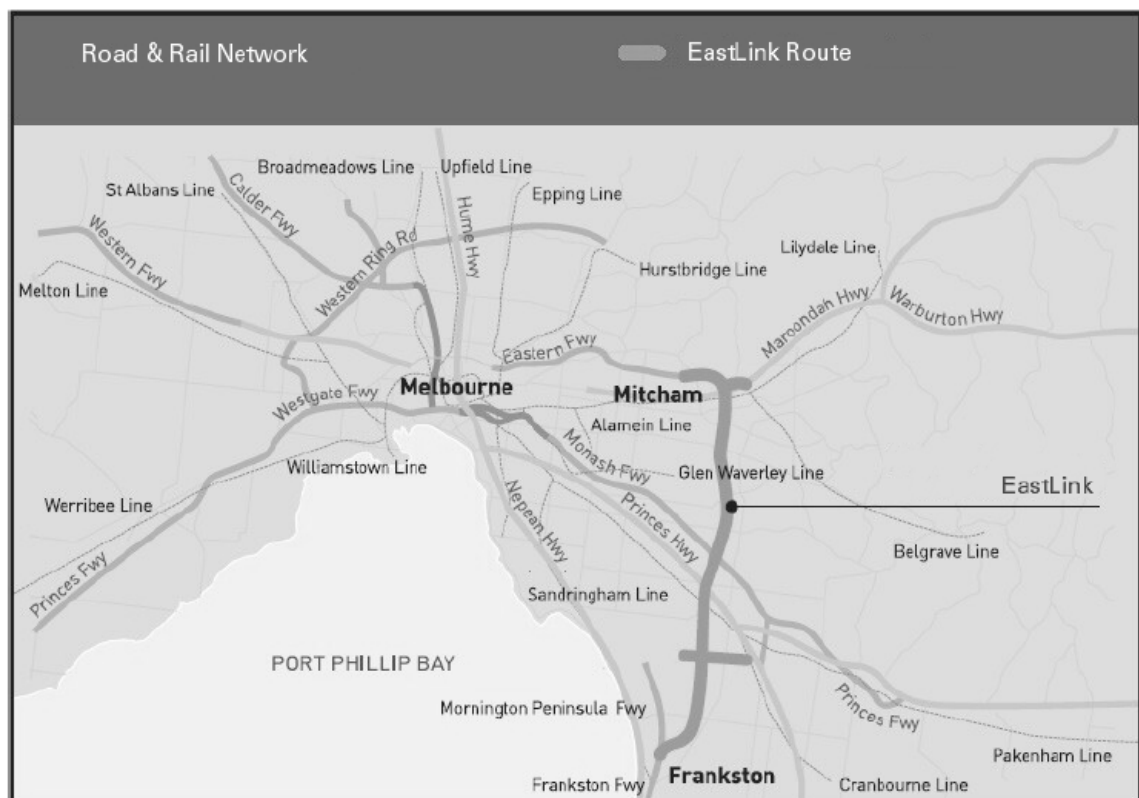


At a \$2.5 billion construction cost over a four year duration, the project includes 17

interchanges, 86 bridges and six pedestrian overpasses, and 40km of linked bicycle and pedestrian paths.

Concession

ConnectEast was awarded the concession to finance, design, construct, commission, toll, operate, deliver customer services, maintain, repair and ultimately hand over EastLink to the State at the end of the concession period. The consortium was one of two competitive bids for the project. ConnectEast (now listed on the ASX) involves Macquarie Bank (as financier), a joint venture of Thiess and John Holland (TJH) (for construction), Sociedad Iberica de Construcciones Electricas, S.A. (SICE) (for the tolling system and integration of the roadside equipment) and Transfield Services



³⁰ Map sourced from presentation by 30 November 2005 - John Gardiner speech to CEDA - The future of road infrastructure (pdf). Presentation slides (pdf). Available at <http://www.connecteast.com.au/pages/media.html>

(Australia) Pty Limited (for operations and maintenance services).

The concession period is approximately 39 years. Based on an expected construction period of approximately 4 years, ConnectEast will operate EastLink for approximately 35 years. The project is funded by bank debt totaling \$2.1 billion and equity funding of \$1.7 billion. The listed company has 17,000 investors including 6,000 Victorians.

Controversy

While there were the usual controversies around traffic, environmental and social impacts that are normally experienced with major roading projects, the biggest controversy surrounding the project centred on the issue of tolls. The Victorian Government had initially given an undertaking that the road would be toll free, a promise on which they later reneged. This led to a total withdrawal of what had been partial federal funding of the project. This policy change caused much debate but the Victorian Government has consistently maintained the position that the project was simply not viable without tolls.

User Benefits

Notwithstanding controversy over tolls the user benefits from the project include:

- > Travel time savings e.g. Mitcham to Frankston in 25 minutes
- > Traffic reductions of up to 30% on key arterials
- > Avoiding 45 sets of traffic lights, 2 level crossings and 12 pedestrian crossings on Springvale road
- > Avoiding 42 sets of traffic lights on Stud Road and Dandelong – Frankston Road

- > A seamless tolling system between EastLink and other toll roads across Victoria
- > A toll cap of \$4.43 (\$2004) for a one-way weekday journey for the full length of the road
- > The lowest tolls of any private toll road in Australia 17 c/km road and 47 c/km tunnel (compared with 21 – 90 c/km road and 74 c/km tunnel for City Link in Melbourne)

Project tendering & evaluation

The project is being facilitated on behalf of the Victorian Government by the Southern and Eastern Integrated Transport Authority (SEITA), a statutory authority established on 1 July 2003. SEITA was responsible for managing the selection of the private sector bids and now manages the State's ongoing interests in the Project.

The development of the expressions of interest and the request for proposal utilized both specialist advisors and in-house experience. The process determined the bidding rules and bonds, and established the preferred risk allocation. Workshops were held to enhance the CityLink model. There was a strong emphasis on reducing the level of technical prescription and maximising competitive tension.

SEITA maintain that the key to the process was maximization of the opportunity for innovation. Rather than design the project in detail SEITA set out the State's requirements in terms of the outcomes required. This included specifying road and tunnel scope and functionality, urban design and public amenity, electronic tolling and interoperability, customer service and KPIs.

The concessionaire has committed to a regime

of KPIs to ensure a level of service delivery in terms of customer service and satisfaction, road maintenance, landscape and urban design maintenance, tolling accuracy, and environmental standards. Up to \$15 million per annum is at stake.

With the construction now underway SEITA's ongoing role includes:

- > Concession deed administration
- > Design review (civil/tolling/urban design)
- > Public / stakeholder communication
- > Liaison with Government agencies (eg: VicRoads)
- > Ensuring best outcomes for the project

From SEITA's perspective the process resulted in an "outstanding winning bid with numerous innovations".³¹ The road proposal was enhanced with extra lanes provided, the risk allocation was maintained, but with a very strong customer service focus and a high level of community engagement. The offer included high quality architecture and landscaping, and comprised considerable construction innovation. The project also includes provision for public transport within the corridor should this prove warranted. Above all from SEITA's perspective there was no additional State contribution.

Sydney Cross City Tunnel

Sydney's \$680 million Cross City Tunnel opened to traffic on 28 August 2005. It is designed to remove east-west through traffic and reallocate CBD road space for public transport, cyclists and pedestrian use, providing the following benefits:

- > Reduced congestion by taking up to 90,000 vehicles (currently 25,000 to 30,000 per day vehicles) off surface roads in the city
- > Improved access for pedestrians, cyclists and public transport
- > 18 sets of traffic lights are avoided by motorists using the tunnel, cutting journey times from 20 minutes to 2 minutes
- > Reduced traffic noise levels
- > Improved air quality by taking cars off surface streets

The efficiency and reliability of east-west travel within central Sydney is also improved as is the north/south traffic flow in the city including traveling times for public transport.

The tunnel is 2.1 kilometres long with two lanes in both directions. The east and westbound tunnels link Darling Harbour in the west with Rushcutters Bay in the east. There are also links from the east to both the City and the Harbour Bridge and Harbour Tunnel. From the west, you can link to the Eastern Distributor southbound to the Airport. From the Eastern Distributor northbound, you can link to the Cross City Tunnel for direct passage to the City South, and Darling Harbour.

Project Development & Approval

In 1998 the Road Traffic Authority (RTA) commenced investigations and consultations to develop a concept design for the tunnel. In August 2000 it released an Environmental Impact Statement detailing the proposed tunnel and potential environmental impacts that would occur as a result.

³¹ Eastlink: Strategies for Success, Presentation to NZCID by Seita representatives May 2006

The key issues identified during the public feedback process involved air quality, regional and local traffic implications, noise and vibration impacts and the justification for the tunnel in the first instance.

In response to the representations, and following further studies, the RTA developed modifications that would result in a more efficient tunnel design and operating conditions. The Minister for Planning gave his approval for the revised conditions to the Approved Activity in December 2002.

In total the project investigation and approval time comprised 5 years.

In September 2000 the RTA sought tenders from private sector organisations to finance, construct and operate the CCT. In February 2002 the Cross City Motorway Consortium (CCM) was announced as the preferred proponent. The tender submission from CCM incorporated changes to the design which the Minister for Roads considered would provide more benefits and reduce construction related impacts to the community.

Boulderstone Hornibrook, in Joint Venture with parent company Bilfinger Berger, commenced construction of the tunnel in January 2003. The Tunnel opened on 28 August 2005, two years and seven months after the commencement of construction.

Despite the fast track delivery method, Cross City Tunnel has been plagued with controversy since its opening. Criticism has centered on six key issues.

Disruption to CBD traffic not using the tunnel

Many of the diversions put in place on the streets caused increased traffic congestion and motorist confusion. It is generally thought that the State Government agreed to the lane

reductions in William Street as part of the contract for the Cross City Tunnel.

Undisclosed contract conditions

The government has repeatedly refused to make the contract available to the public, much to the dismay of the media and the State's Auditor-General. A summary has been released, which contained details of more possible road disruptions which would result in making traffic congestion worse for motorists not using the tunnel. It was also revealed that 50 cents of the toll price is due to a \$105 million payment that the operators had to make to the government for permission to build the tunnel. In late October 2005 after ongoing criticism, some contract terms were released to the public, but the government is withholding release of 3000 pages of material. A few days after this the head of the Roads and Traffic Authority was sacked, for failing to disclose an amendment to the contract, which allowed the toll to be increased by 15 cents. In November 2005, the Independent Commission Against Corruption was asked to investigate allegations that sensitive Cabinet documents were leaked to the Cross City Tunnel operator during negotiations.

Toll price

The price of the toll for a one-way trip was \$3.56 with an E-tag, and \$5.16 without an E-tag. Additionally, the price of the toll is automatically increased by the CPI each quarter, whereas other tolls are usually increased less frequently, but in neat increments of 50 cents

Toll applies in both directions

The toll for the Cross City Tunnel is being charged in both directions, unlike other toll roads near the city centre, such as the Sydney Harbour Bridge, the Sydney Harbour Tunnel,

and the Eastern Distributor, all of which only charge for travel in one direction.

Difficult payment options & penalties

There is no cash payment for the toll and drivers who do not have an E-Tag and who use the tunnel need to phone the tunnel operators or go the tunnel's website after their journey. They are required to pay the toll, plus an additional \$1.60 administration fee. Those who don't do this will receive 2 warning letters, then a \$130 fine.

Cross City Tunnel in balance

There are clearly lessons to be learned from this project. At the initial phases of the project there was high level public support for the Cross City Tunnel. However a key event in its development was a decision by the RTA in 2002 that the project must be delivered at "no cost" to the State Government. This policy decision, combined with a local authority desire to improve the pedestrianising of local streets, precipitated a number of changes to the project, including restriction of vehicle access on the local roads, which the public was not fully consulted on.

From a revenue perspective the effect of these changes was to transform an A\$40m funding deficit into a A\$105m surplus for the government. From a public perception it was seen as a deliberate strategy to funnel traffic through the tunnel which was subsequently perceived by the public as deliberate manipulation by the private sector.

Contrary to popular and media commentary, which at least initially portrayed the deal as a "private sector rip off" it is clear from the Select Committee report into the project published in December 2005, that the public sector was clearly in control of contract negotiations with the consortium. In fact it was highly successful in achieving its goal of not only delivering the

project at no net cost to the government, but of securing an up front payment of A\$105m.

However, it is now apparent that the cost of the changes was a significant loss of public support leading to criticism over critical elements of the project including the contract with the operator, the toll level and associated road changes.

Despite the public and media controversy, the Treasury view is much more balanced. As noted by Dr Kerry Schott, Executive Director, NSW Treasury to the Select Committee which reported on the project:

"The fact remains that the project delivered a very successful engineering outcome in a more difficult than average construction environment. One cannot find too many projects that require tunnelling under a major city with complex interchanges, for example, with existing water structures and pipes, and yet deliver construction before time and on budget."

Moreover, the project was delivered without the need for public funding and with all of the revenue risk being borne by the private sector.

I NSW New Schools Project

The New Schools Project was the first project delivered under the NSW Government's Working with Government: Guidelines for Privately Financed Projects, released in November 2001. It was also the first social infrastructure PFP in NSW and the first schools PFP in Australia.

Background

The New Schools Project commenced in 2000 with investigations by the Department of Education and Training (DET) of the feasibility of packaging schools delivery as a privately

financed project as a means of advancing development of schools. The project then progressed to expression of interest phase in October 2001, moving through a request for detailed proposals and best and final offer, before financial close was achieved in March 2003.

The project required development of new procurement *tools* for the acquisition of school facilities, including a schools output specification, risk analysis and allocation, and payment mechanism. A total of nine schools have opened in north-western and western Sydney, the Illawarra and the Central Coast. Four schools opened in 2004 and five in 2005.

Evaluation

A New South Wales Treasury post implementation review found that while the project faced delays in its original time lines, due to the complexity of the first PFP contract model, the PFP schools were delivered some two years earlier, on average, than would have been possible had traditional public sector funding been used. PFP delivery enabled a faster response to demographic needs in urban growth areas. Key benefits of the PFP model identified in the NSW Treasury report included:

- > The schools were constructed in a shorter time frame and enabled an earlier opening than would normally have been possible
- > In addition to the provision of school facilities, the contract provided a child care centre at eight of the schools
- > Provision by the operator of an onsite manager by the contractor has released school principals' and teachers' time that was previously spent dealing with facilities management issues
- > The New Schools Project was able to deliver better value for money as tested

against the Public Sector Comparator

- > PFP allowed DET to bring forward new school delivery by three years on average
- > The report listed a series of recommendations to reduce complexity of the contract evaluation, documentation and payment mechanisms

Response to Criticisms

Criticism of the project at the time included concerns:

- > That it represented an outsourcing or privatising of public education
- > That the Government would abrogate responsibility for teaching and student outcomes; that facilities standards would be less than traditionally delivered schools, and
- > That the project financing would be more expensive than for traditional delivery (leading to reduced resources for education)

The Review received formal submissions from the New South Wales Teachers Federation, The Public Service Association and the Secondary Principals Council. While these submissions did contain some criticisms of the schools, mostly in the area of DET's design standards, they were positive regarding the operation of the contract. The positive sentiments expressed, including satisfaction with resources provided, and responsiveness to queries or calls for assistance on facilities management issues, represent a substantial shift from early concerns.

The Working with Government (WWG) Guidelines required that PFP contracts comply with certain industrial relations and community relations requirements. The PFP contract

complied with the WWG Guideline requirements. In terms of industrial relations, no employees were transferred to the private sector under the Schools Project. DET was able to meet the WWG Guideline requirements for community relations planning through its standard community consultation procedures. DET undertook a range of activities and consulted broadly during the development of the project and this was key to the overall success of the initiative.

I Private Finance Initiatives in context

The overwhelming impression from the various jurisdictions visited is that use of PFIs provides a useful option for leveraging both private sector financing and expertise for public infrastructure projects.

PFIs are particularly suited to complex projects of substantial size which require extensive cooperative effort on the part of the project partners.

Strong political support and buy-in is critical to their success, as is the establishment of centres of expertise within the public sector to ensure the necessary specialist skills are developed and maintained to the standard required.

PFIs have their costs and complexities, and can be controversial. They are not suitable to the majority of public sector projects and typically comprise 10% to 15% of national public works. However, when applied correctly, and when outputs can be clearly specified and performance transparently measured, experience has shown PFIs do offer value for money, faster project delivery, and better whole of life asset management over traditional procurement methods.

A key benefit is that equity in the project incentivises the private sector to focus on long

term outcomes in a partnership with the public sector.

From a public sector view point the injection of private finance frees up public funds for other infrastructure projects or other public spending such as health and education.



↘ Conclusion

Having examined infrastructure development in New Zealand in comparison with Ireland, United Kingdom and with Victoria, New South Wales and Queensland a number of key conclusions can be drawn.

Firstly it must be acknowledged that the New Zealand Government has recognised the need for significant infrastructure development and taken action to redress the deficit. However, despite the Government's best efforts, progress in New Zealand is slow relative to each of the comparative locations visited.

Six key steps need to be taken to speed up the process and deliver the infrastructure New Zealand desperately needs:

1. Government leadership and commitment to national infrastructure development
2. A long term integrated plan
3. A streamlined planning and approval process, particularly for projects of national or regional importance
4. Integrated planning and governance
5. Adoption of a wider range of procurement and financing options, including the appropriate mix of public and private financing of infrastructure based on value for money criteria. This should include greater debt financing by the government and the use of PPPs
6. Legislative change

Appendices

Appendix 1

List of contracted
Australian PPP / PFI pro-
jects as at July 2006

New South Wales State Government	
<p>New Schools Project #1</p> <p>Parramatta Transport Interchange</p> <p>Cross City Tunnel</p> <p>Chatswood Transport Interchange</p> <p>Western Sydney Orbital</p> <p>Newcastle Community Health Centre</p> <p>Alternative Waste Technology Facility</p> <p>Newcastle Mater Hospital</p> <p>New Schools Project #2</p> <p>Long Bay Prison and Forensic Hospitals</p> <p>Lane Cove Tunnel</p>	
Northern Territory Government	
<p>Darwin City Waterfront Redevelopment/Darwin Convention and Exhibition Centre</p>	
Queensland State Government	
<p>Southbank Education & Training Precinct</p> <p>North South Bypass Tunnel</p>	
South Australia State Government	
<p>Regional Police Stations & Courts Administration Authority Facilities</p>	
Tasmania	
<p>Risdon Prison Redevelopment</p>	
Victoria State Government	
<p>County Court</p> <p>Casey Community Hospital</p> <p>Film and TV Studios</p> <p>Spencer Street Station</p> <p>Echuca Rochester Wastewater Treatment Plant</p> <p>Mobile Data Network</p> <p>Enviro Altona</p> <p>Mobile Metropolitan Radio</p> <p>Correctional Facilities</p> <p>Eastlink</p> <p>Emergency Alerting System Project</p> <p>Royal Melbourne Showgrounds Redevelopment Project</p> <p>Royal Women's Hospital Redevelopment</p> <p>Central Highlands Water – Ballarat North Water Reclamation</p> <p>Wodonga Wastewater Treatment Upgrade Project</p> <p>Melbourne Convention Centre</p>	
Western Australia State Government	
<p>CBD Courts Complex</p>	
Commonwealth Government of Australia	
<p>Defence Headquarters Joint Operation Command Facility</p> <p>Contract entered – June 2005</p> <p>Construction complete – mid 2008</p>	

Appendix 2

Australian PPP / PFI projects in the market as at July 2006

Projects	Estimated timing
Commonwealth Government of Australia	
Single Living and Environment Accommodation Precinct	EOI close – November 2005 RFP (Part 1) close – May 2006
New South Wales State Government	
Bonnyrigg Living Communities Project (Social Housing) PPP	EOI close – 30 March 2005 RDP issue – September 2005 RDP close – second half 2006
RailCorp Rolling Stock	EOI close – 13 October 2004 RDP close – October 2005 Contractual close – second half 2006
Orange-Bloomfield Hospital Redevelopment	EOI close – 1 Aug 2006 Contractual close – mid-2007
Queensland State Government	
Townsville Industrial Recycling	NM Rothschilds & Sons (Australia) has been removed as preferred partner

Projects	Estimated timing
Queensland State Government <i>cont'd</i>	
Townsville Ocean Terminal	Preferred developer announced – September 2005 Contract close – late 2006
Gold Coast Marine Development Project	Shortlist developed early 2006 EIS commenced – October 2005
Victoria State Government	
Barwon Water – Biosolids Management	EOI Close: 5 June 2005 Release of RFT: Oct 2005 Contractual Close: August 2006 Facility completed: 2008
Royal Children's Hospital	EOI Close: 8 June 2006 Release of RFT: October 2006 Contractual Close: Late 2007 Facility completed: 2010

I Appendix 3

Potential Australian projects considering PPP/PFI delivery as at July 2006

Project	Possible release (to the market) < 12 months () < 24 months *
Commonwealth Government of Australia	
Single Living and Environment Accommodation Precinct (Part 2)	*
New South Wales State Government	
Royal North Shore Hospital Redevelopment, Stage 2	*
Auburn Health Services Redevelopment	
Northern Beaches Hospital	
Queensland State Government	
New Queensland Drivers Licence	
Airport Link	
Very High Speed Broadband (Project Vista)	
Toowoomba Bypass	*
Gold Coast Rapid Transit	*
Gold Coast Hospital	*

Project	Possible release (to the market) < 12 months () < 24 months *
Queensland State Government	
Package of Schools on Sunshine Coast	*
Package of Schools in Western Corridor	*
South Australia State Government	
State Aquatic Centre	
Victoria State Government	
Melbourne Wholesale Market Redevelopment	
Housing Sector	
Supreme Court Redevelopment	*
Hospital Sector	
Research Facilities	
Water Sector	
Aged Care	
Western Australia State Government	
Office Accommodation	
Health Infrastructure	
Public Housing	



↘ Glossary

ALPURT B2 Orewa to Puhoi motorway extension

An Bord Pleanála the National Appeal Board in Ireland for planning applications

ARTA Auckland Regional Transport Authority

BOO Build Own Operate, a contract type

BOOT Build Own Operate and Transfer arrangements allow for the contractor to build, own and operate and at the end of the contract transfer the facility back to the principal, a contract type

BOT Build Own Transfer, a contract type

CBD Central Business District

CPI Consumer Price Index

DBFM Design Build Finance and Maintain, a contract type

D&C Design and Construct, a contract type

DCM Design Construct and Maintain, a contract type

Defra Department for Environment, Food and Rural Affairs

DET NSW Department of Education & Training

DfT Department for Transport

EPA Environmental Protection Agency

E-Tag Electronic Tag for automated tolling

GCR The World Economic Forum's Global Competitiveness Report

GDP Gross Domestic Product

Gross Fixed Capital Formation GFCF is the term used in the System of National Accounts

to refer to gross investment in tangible assets

GMP Guaranteed Maximum Price Contract, a contract type

HM or HM Treasury Her Majesty's Treasury

IHAPS Independent Hearings and Assessment Panels

LTMA Land Transport Management Act

LTNZ Land Transport New Zealand

MOD Ministry of Defence

ODPM Office of the Deputy Prime Minister

OECD Organisation for Economic Cooperation and Development

OJEU Official Journal of the European Union

PFI Private Finance Initiative, used synonymously with PPP and PFP in this report

PFP Privately Financed Project, used synonymously with PPP and PFI in this report

PPP Public Private Partnership, used synonymously with PFI and PFP in this report

NDP Irish National Development Plan

RMA Resource Management Act

RTA Road Transport Authority

RTEG Regional Transport Executive Group comprising the senior transport executives of the Auckland District and Regional authorities

SEITA Southern and Eastern Integrated Transport Authority

SEPP State Environmental Planning Policy in New South Wales

VPD Vehicles Per Day

WWG Working with Government—a process

to guide private sector interaction with the
NSW Government

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- <http://www.treasury.govt.nz/workingpapers/2006/pp06-02.asp>

Public Private Partnership standard conditions and guidance can be found at:

- http://www.hm-treasury.gov.uk/documents/public_private_partnerships/key_documents/standardised_contracts/ppp_keydocsstand_index.cfm

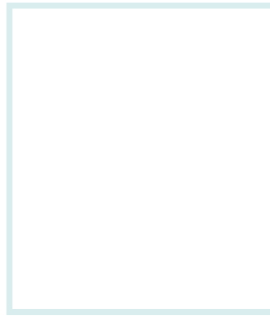
- http://www.hm-treasury.gov.uk/documents/public_private_partnerships/ppp_links.cfm

- <http://www.partnershipsuk.org.uk/information/information-guidance.asp>

- <http://www.4ps.co.uk/Home.aspx?pageID=7.0.2&ctl=Pubs&Type=Guidance>

- <http://www.ppp.gov.ie/keydocs/guidance/>

- <http://www.partnerships.vic.gov.au/CA25708500035EB6/0/C0005AB6099597C2CA2570F50006F3AA?OpenDocument>



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