

# Infrastructure Finance and Funding Reform

---

April 2012



## FOREWORD

Infrastructure is critical to national productivity and economic growth. However, across a range of measures, Australia's infrastructure is not keeping pace with either current or projected demand. Without resolution, these capacity constraints will continue to impose negative outcomes on national productivity.

In recognising the need for greater infrastructure investment, the Infrastructure Finance Working Group (IFWG) was established to identify current barriers to attracting infrastructure finance and to develop options to encourage greater private sector investment. The IFWG consulted stakeholders on current practices related to infrastructure finance and funding in Australia and drew on relevant international experiences.

The IFWG released its issues paper *Infrastructure Finance Reform* in July 2011 for consultation until September 2011. The issues paper identified a range of potential obstacles to more efficient infrastructure investment and invited a discussion of potential reforms. Twenty eight submissions were received from a wide range of stakeholders, including State and Territory treasuries, public sector infrastructure delivery agencies, superannuation funds, investment companies, bankers, contractors and consultants.

Following the consultation period, the IFWG considered the submissions with a view to identifying opportunities to increase the capacity for infrastructure investment and, in particular, the key reforms required to facilitate greater private sector infrastructure investment. Some of the specific issues raised included the role of alternative sources of finance such as superannuation funds, the high cost of preparing bids for infrastructure projects and the desirability of developing an enhanced investment pipeline to reduce uncertainty surrounding upcoming projects.

This report, *Infrastructure Finance and Funding Reform*, considers and builds on the issues paper, and the submissions received, with recommendations for infrastructure financing and funding reform for consideration by the Infrastructure Australia Council.

Importantly, in developing its recommendations, the IFWG focused on economically marginal projects that are currently not being delivered – despite the potential of these projects to generate strong public benefits. In seeking to get such projects off the ground, the IFWG determined that the central issue impeding greater private sector involvement was the lack of available funding. Ultimately, infrastructure investment needs to be paid for regardless of how it is financed. Therefore, the IFWG believes that meaningful increases to the level of infrastructure investment in Australia will require a sustained period of reform by governments to create funding capacity to get the market moving.

**Infrastructure Finance Working Group**

# THE INFRASTRUCTURE FINANCE WORKING GROUP (IFWG)

## Terms of Reference

IFWG is an expert advisory panel established to provide advice to Infrastructure Australia on infrastructure finance policy issues.

IFWG's terms of reference are to:

- advise Infrastructure Australia on the implementation of certain measures of the 2011-12 Commonwealth Budget relating to infrastructure investment;
- identify and advise on impediments and options for reform to infrastructure finance policy; and
- advise on the role of private finance, user charges and alternative finance models in the provision of public infrastructure.

## Membership

The membership of the Infrastructure Finance Working Group is:

- Mr Jim Murphy (Chair), Executive Director, Australian Treasury
- Mr Ross Rolfe (Deputy Chair), Managing Director, Resources Infrastructure, Lend Lease
- Dr Paul Schreier, Deputy Secretary, Department of Prime Minister and Cabinet
- Mr Mike Mrdak, Secretary, Department of Infrastructure and Transport
- Ms Pauline Vamos, CEO, Association of Super Funds of Australia
- Mr Stephen Williams, Country Executive, Royal Bank of Scotland
- Mr Julian Vella, National Leader, Infrastructure Projects Group, KPMG
- Mr David Byrne, Head of Utilities & Infrastructure Australia, ANZ
- Mr Brendan Lyon, CEO, Infrastructure Partnerships Australia

# Contents

- FOREWORD ..... I**
- THE INFRASTRUCTURE FINANCE WORKING GROUP (IFWG) ..... II**
- REFORM ACTIONS..... IV**
- FINDINGS & RECOMMENDATIONS ..... V**
  - Reforming Funding ..... v
  - Better Investment Planning ..... v
  - Developing a More Efficient Market ..... vi
- 1. THE INFRASTRUCTURE INVESTMENT CHALLENGE..... 1**
  - 1.1 The Importance of Funding ..... 3
  - 1.2 Stakeholders ..... 3
    - 1.2.1 The Community ..... 4
    - 1.2.2 Industry ..... 5
    - 1.2.3 Governments ..... 6
  - 1.3 The Focus of Reform ..... 8
- 2. SOLUTIONS..... 9**
- 2.1 REFORMS TO INFRASTRUCTURE FUNDING ..... 10**
  - 2.1.1 User Charging and Network Pricing ..... 11
  - 2.1.2 Strategic Review of Brownfield Assets ..... 14
  - 2.1.3 Government Co-Funding ..... 15
  - 2.1.4 Capturing more value from infrastructure development ..... 16
  - 2.1.5 Government Balance Sheet Reform ..... 18
- 2.2 BETTER INVESTMENT PLANNING ..... 20**
  - 2.2.1 Developing an Efficient Infrastructure market ..... 20
  - 2.2.2 Long-term strategic planning ..... 21
  - 2.2.3 Developing a Pipeline of Projects ..... 22
  - 2.2.4 Reforms to PPP Processes ..... 23
  - 2.2.5 Benefit-Cost Analysis ..... 24
- 2.3 DEVELOPING A MORE EFFICIENT MARKET ..... 25**
  - 2.3.1 Government Financing Assistance ..... 25
  - 2.3.2 Risk allocation ..... 26
  - 2.3.3 Superannuation Funds Investments in Infrastructure ..... 28
  - 2.3.4 Private Bond Market ..... 30
  - 2.3.5 Taxation Treatment of Infrastructure Investments ..... 32
  - 2.3.6 Infrastructure Fund ..... 33
- 3. CONCLUSION ..... 34**
- APPENDIX 1: 2011-12 FEDERAL BUDGET MEASURES ..... 36**
- APPENDIX 2: THE COMMONWEALTH'S INFRASTRUCTURE INVESTMENT FRAMEWORK ..... 37**
- APPENDIX 3: ACCOUNTING AND BUDGET TREATMENT OF GOVERNMENT INFRASTRUCTURE INVESTMENTS ..... 38**
- APPENDIX 4: EXAMPLES OF SUCCESSFULLY FINANCED AND FUNDED INFRASTRUCTURE PROJECTS ..... 40**
- APPENDIX 5: MEASURES FOR ACTION ..... 43**

## REFORM ACTIONS

### Reform Funding

- Increase the capacity to invest through user charging
- Identify and monetise existing assets
- Capture additional value from infrastructure investment
- Australian Government place higher priority on infrastructure funding
- Australian Government consider co-funding and other flexible funding models
- Incentivise Australian Government payments to the States

### Better Planning

- Prepare long-term strategic plans
- Develop transparent, robust and funded pipeline
- Reduce the cost of procurement and coordinate investment nationally

### Efficient Markets

- More flexible demand risk allocation
- More flexible refinancing risk allocation
- Diversify sources of debt
- Facilitate greater superannuation investment

# FINDINGS & RECOMMENDATIONS

## REFORMING FUNDING

1. A major constraint on the delivery of social and economic infrastructure is the funding capacity of Australian governments. This is distinct from the capacity of the private sector to provide financing capital for infrastructure projects. Solutions to the backlog of infrastructure investment, or 'infrastructure deficit', will require substantial funding reform but will lead to greater private sector investment in infrastructure.

**Recommendation 1:** Governments should implement targeted measures such as user charges to enhance price signals to better balance supply and demand, and to increase the funding available for infrastructure investment.

**Recommendation 2:** State and Territory governments should identify and monetise suitable public assets, allowing the freed up capital and avoided debt repayments to be recycled/invested into infrastructure projects.

**Recommendation 3:** The Australian Government should give a higher priority to infrastructure funding in the immediate-term to achieve positive reforms that will get nationally significant projects to the market in the short-to-medium term.

**Recommendation 4:** For appropriate projects, the Australian Government should consider the greater use of alternative funding models, including co-funding availability payments alongside State and Territory governments.

**Recommendation 5:** Governments should utilise appropriate models to drive revenue from the broader benefits delivered by major infrastructure projects, such as value capture for transport infrastructure.

**Recommendation 6:** The Australian Government should strengthen its linking of infrastructure funding to State and Territory governments implementing agreed reforms including changes that increase their capacity for investment.

## BETTER INVESTMENT PLANNING

2. Critical reforms are needed to create a better articulated and transparent national infrastructure market. This will involve long-term planning to guide infrastructure priorities, options for structuring projects to attract private capital and expanding the investment pipeline.
3. A clearer, funded and national pipeline will naturally drive a much more efficient infrastructure market and allow for a sharing of experiences and procurement outcomes to be applied more widely across Australia's governments, driving greater efficiency.

**Recommendation 7:** Australian governments should prepare 20-year infrastructure strategies, with a common framework and timeframe across jurisdictions, allowing for the development of a clear and strategic national hierarchy of infrastructure plans.

**Recommendation 8:** Long-term infrastructure strategies should be used to develop a more transparent, robust and funded pipeline of infrastructure projects and must include an early indication of the likely financing and funding sources, enabling the public and private sectors to efficiently deploy capital and resources.

**Recommendation 9:** Governments should reduce procurement costs and coordinate procurements across jurisdictions.

## DEVELOPING A MORE EFFICIENT MARKET

4. Achieving the reforms to funding capacity will unlock a substantial pipeline of projects, increasing the call on equity and debt capital to finance the projects. A deeper, more competitive capital market will assist in getting the pipeline off the ground.

**Recommendation 10:** Governments should take a more flexible approach to the allocation of risk, including demand risk, for high net public benefit projects that have the capacity to generate revenue streams from users.

**Recommendation 11:** In the short term, governments should adopt a flexible approach to refinancing risks, as the tenor and cost of debt pose an ongoing challenge to greater involvement by the private sector in the financing of infrastructure.

**Recommendation 12:** To encourage financial institutions such as superannuation funds to further invest in long-term assets such as infrastructure, the Australian Government should examine the structure, regulation and taxation of retirement income products and the way in which they may impact on the demand for long-term investments.

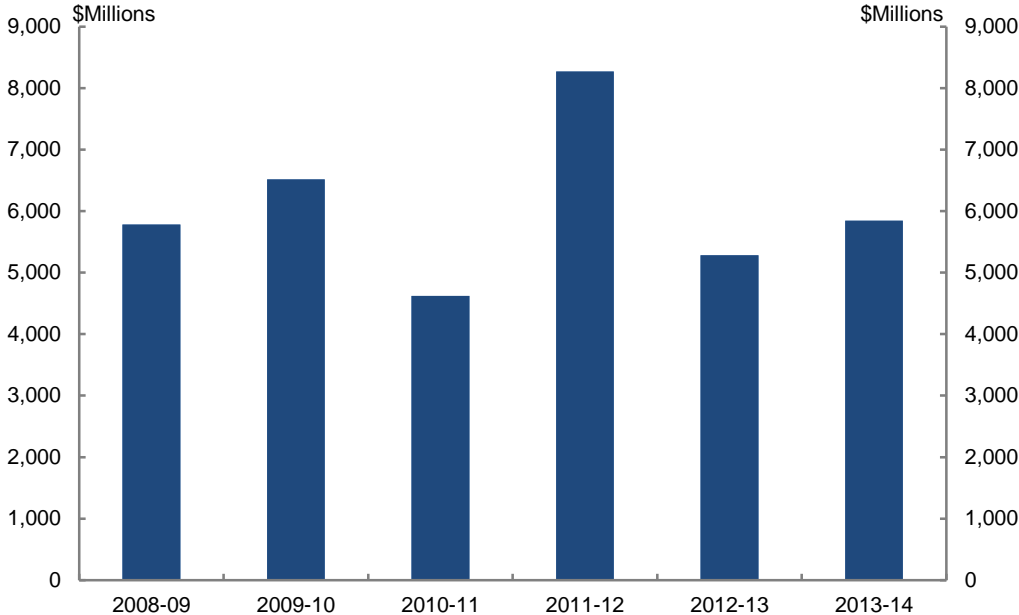
**Recommendation 13:** The Australian Government should remove unnecessary regulatory barriers that currently impede retail corporate bond issuance in Australia as a way to diversify the sources of debt.



# 1. THE INFRASTRUCTURE INVESTMENT CHALLENGE

- 1. Investment by governments in high quality infrastructure projects is critical to improving national productivity and underpinning economic growth. For example, infrastructure connects manufacturers with markets, consumers to goods and services and commuters to their workplaces.
- 2. The dividends economies can gain from infrastructure investment are unequivocal. Analysis undertaken by the Bureau of Infrastructure, Transport and Regional Economics (BITRE) found that current Australian Government investment in Australia’s highways, interstate rail network and urban public transport systems will deliver a return of \$2.65 on every \$1 now being invested.<sup>1</sup>
- 3. This being the case, it is clear that governments will continue to play a significant role in delivering the infrastructure that Australia needs. Indeed, over the six years to 2013-14, the Australian Government has committed around \$36 billion to Australia’s transport infrastructure (see Figure 1) – which is the largest ever commitment to transport infrastructure by a government in Australia.
- 4. Under current arrangements, governments do not have sufficient headroom on their budgets to fund the level of infrastructure required.

**Figure 1: Australian Government Transport Infrastructure Funding 2008-09 to 2013-14**

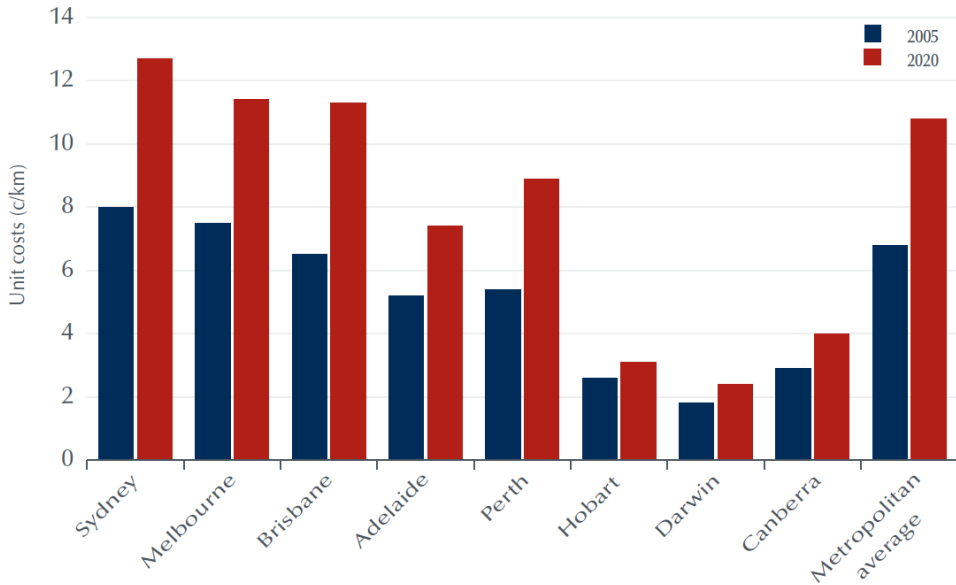


Source: Treasury

<sup>1</sup>Minister for Infrastructure and Transport Media Release AA189/2011 “Building Better Infrastructure Delivers \$77 Billion Dividend”, 23 October 2011.

5. Addressing the constraints on the capacity of governments to invest in infrastructure is particularly important given that the demand for infrastructure is projected to increase significantly in the coming years.
6. Demographic challenges associated with a growing population and greater urbanisation of our major cities will also contribute to this need. Increasing costs of congestion are symptomatic of this problem.
7. The National Transport Commission and BITRE have noted that future population growth is expected to have enormous flow on implications for transport in Australia, and that the avoidable cost of congestion to the Australian economy is predicted to increase from around \$9 billion in 2005 to around \$20 billion by 2020.<sup>2</sup> (See Figure 2).
8. The implications of Australia’s ageing population will also have a corollary demand for investment in social and utility infrastructure.

**Figure 2: Average unit costs of congestions for Australian Metropolitan areas – current and projected.<sup>3</sup>**



Source: Bureau of Transport and Regional Economics [BTRE], 2007, Estimating urban traffic and congestion cost trends for Australian cities, Working paper 71, BTRE, Canberra ACT.

<sup>2</sup> National Transport Commission, “Smart transport for a growing nation: discussion paper”, September 2011.  
<sup>3</sup> Note: Costs here refer to avoidable social costs, and are based on the deadweight losses associated with the congestion levels.

9. It is important to recognise that if the infrastructure shortfall is not addressed, it will have an adverse impact on Australia's competitiveness, for example, the increasing costs of transport and logistics, utilities and social infrastructure services point to a shortfall in capacity and will continue to impart cost of living pressure on households and erode the competitiveness of Australian businesses.
10. The Infrastructure Finance Working Group (IFWG) was established to identify barriers to more efficient delivery of infrastructure and the services it underpins. Importantly, the IFWG brought together experts from both the private and public sectors and was tasked with investigating ways to improve the capacity of governments to invest in infrastructure projects, as well as explore possible improvements to the ways in which the private sector currently invests.
11. The IFWG noted that work on the implementation of the 2011-12 Budget measures is ongoing. In particular, in relation to the infrastructure tax loss incentive measure, the IFWG expects exposure draft legislation to be released. More information on the progress of these Budget measures can be found in [Appendix 1](#).

## **1.1 THE IMPORTANCE OF FUNDING**

12. In approaching its task, the IFWG sought to answer the key question: how to get the market moving? The IFWG found that the primary issue preventing more projects coming to market was the lack of available funding.
13. It is important to differentiate between financing and funding. The term funding, as used in this report, refers to how infrastructure is paid for. Ultimately, there are only two sources of funding for infrastructure, government investment or direct user charges. This is opposed to financing which refers to the way in which debt and/or equity is raised for the delivery and operation of an infrastructure project.
14. Australia must embrace bold reforms to find new opportunities to fund projects - and efficient finance - to support an enlarged program of infrastructure delivery. The IFWG will explore a range of options to increase government capacity to fund infrastructure projects.

## **1.2 STAKEHOLDERS**

15. A useful way to think about the specific issues raised throughout the consultation period is to consider each of the main stakeholders. The three stakeholders in the demand and supply of infrastructure are: the community, industry and government.
16. Understanding the motivations, interests and inter-related objectives of these stakeholders provides a solid platform on which to assess the recommendations of this report.

17. These stakeholders' interests align in some aspects. For instance, in a number of cases each stakeholder has a tradition of treating public infrastructure largely as a 'public good'<sup>4</sup> in which consumption has no identifiable cost. The IFWG recognised that this was an out-dated model and that change in the traditional infrastructure funding model is needed if we are to respond adequately to future challenges.
18. The IFWG came to appreciate that at the heart of the infrastructure funding challenge are concerns about the appropriate roles for government and the private sector and how the risks and benefits inherent in infrastructure projects can be efficiently shared.
19. Solving the funding challenge will require an acceptance from all stakeholders that there is no such thing as a 'free lunch'. Ultimately, infrastructure investment will be funded either through taxation and public sector borrowings, or through direct user charges.

### 1.2.1 THE COMMUNITY

20. The IFWG was conscious throughout its deliberations that solutions to infrastructure problems will require substantial input and support from the community. Fiscal limitations mean there are a number of difficult trade-offs and choices the community will need to consider.
21. For example, while the community wants and expects high quality transport infrastructure, it is clear that the current road funding/taxing arrangements will struggle to meet Australia's future transport challenges. As congestion-related costs rise, so too will the pressure to seek a greater community contribution. The same is true in other infrastructure sectors such as utilities.
22. The traditional model of government grants conceals the real cost of infrastructure to the community in the form of taxes. Here, users do not directly see the contribution they make, resulting in the tendency for infrastructure assets to be overused. The costs of such perceived 'free' access to roads are already being felt - particularly through congestion in our cities. Just expanding the current supply of roads is rarely a final solution.
23. One way to respond is for the community to pay higher taxes to fund a higher spend by governments. Alternatively, the private sector could play a greater role in directly providing road services, although this would necessarily involve an expanded role for direct user charges.

---

<sup>4</sup> Public goods have certain characteristics – consumption of the good by one individual does not reduce availability of the good for consumption by others – and no-one can be effectively excluded from using the good.

24. The concept of road user charging is not new to Australian drivers as many of the major thoroughfares in Brisbane, Sydney and Melbourne are already tolled. If the community wants better infrastructure of this kind it needs to reconsider its willingness to pay for such projects.
25. Some members of the community will choose alternative options that are already available, for example, they may seek to travel via different routes or at different times, to car pool, to take public transport, or not to travel at all. Thus, another way could be for governments to better utilise existing transport assets by better managing traffic flows and increasing their investments in public transport. In practice, the solution will probably be an amalgam of each of these.
26. Australia's governments will need to engage in a more transparent dialogue with the community about the options and pathways that exist to create infrastructure funding capacity.

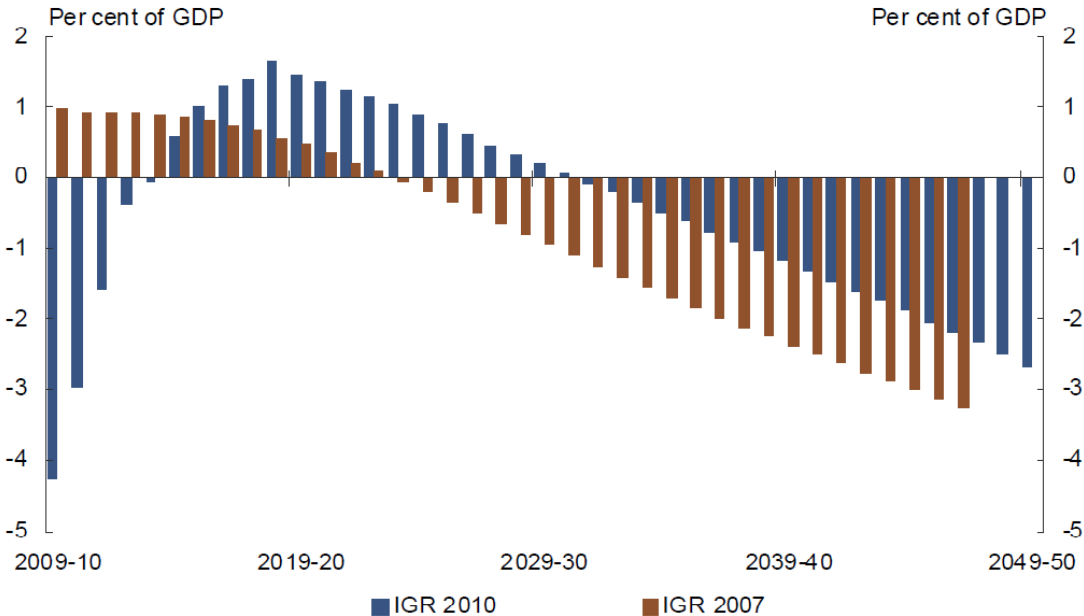
### **1.2.2 INDUSTRY**

27. The process of investing in infrastructure assets is by its nature inherently risky given the large upfront costs and long time frames from conception to delivery and revenue generation. This affects the private sector's willingness to invest and is further tested by increases in the cost and availability of credit for infrastructure projects following the Global Financial Crisis.
28. Nonetheless, the private sector has demonstrated that it is willing to share some of the financial burden of infrastructure investment with governments, so long as projects can deliver an acceptable commercial rate of return. There are also some private sector companies that are willing to take on risk as they see their comparative advantage in managing risk.
29. One clear issue identified by the IFWG was an aversion by some private sector investors to 'greenfield' infrastructure projects. On the other hand there is a strong appetite, particularly from superannuation and other institutional investors for established brownfield assets.
30. The concept of risk is central to generating the commercial rates of return sought by the private sector. It could be argued that it is in industry's interests to transfer risk to government and to increase the overall level of government expenditure.
31. Overall, the IFWG notes that it is in the interests of all stakeholders to allocate risk to the party best placed to manage it and to seek the best value for money for all parties.

### 1.2.3 GOVERNMENTS

- 32. Governments are aware of the need for greater and better quality infrastructure investment as an important way to drive improvements in growth and productivity. The IFWG considers that Australian governments must continue to attach a priority to infrastructure investment by maintaining an ongoing commitment to infrastructure investment. As part of this, it is imperative that governments clearly articulate and identify projects that are in the public interest and will enhance long-term productivity.
- 33. Any change in governments’ priorities will, however, need to be balanced against other government expenditure priorities. Without reducing allocations to these areas, compromising commitments to achieving budget surpluses or increasing the available pool for distribution through greater taxation revenue, the impetus for greater private sector involvement becomes evident. In prioritising spending governments must also take into consideration the broader fiscal environment they operate in.
- 34. As Figure 3 demonstrates, the Australian Government is facing significant fiscal pressures in light of future demographic challenges. As the Intergenerational Report states, if the ageing pressures are realised, spending is projected to exceed revenue by 2 ¾ per cent of GDP in 40 years time, and net debt will grow to around 20 per cent of GDP by 2049-50.

**Figure 3: Australian Government Projected Fiscal Gap<sup>5</sup>**

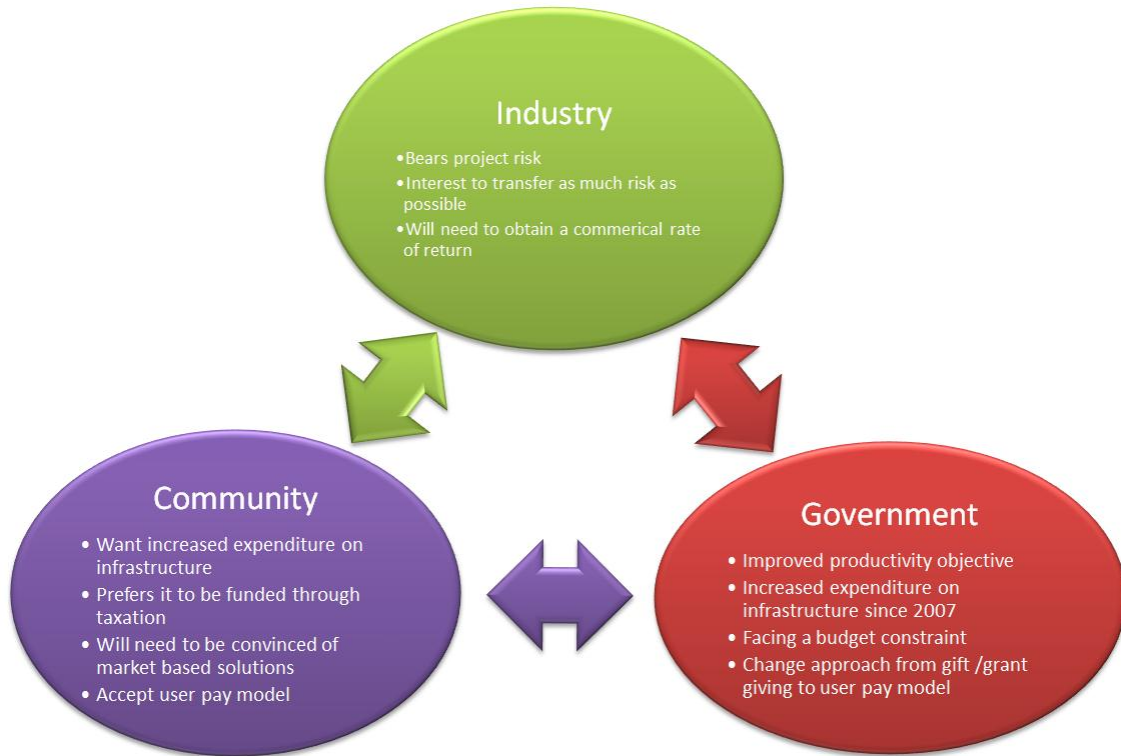


Source: Australian Government Intergenerational Report (2010)

<sup>5</sup> Note The fiscal gap is total Australian government receipts minus total Australian government payments (excluding interest).

35. Despite these projected fiscal pressures the IFWG noted that the Australian Government is unique amongst Australia's governments, in that it has substantial capacity for additional borrowings on its balance sheet, within its AAA credit rating. However, it is unlikely that the Government will pursue additional borrowing given the Government's current fiscal strategy of returning the Budget to surplus in the short term.
36. At the State and Territory level, governments are reluctant to take on additional borrowings for infrastructure development, as increases in their net debt positions will generally have a negative impact on their ability to maintain AAA credit ratings. The impact of this inflexibility on State and Territory balance sheets has been a lack of sufficient progress in the development of new infrastructure projects.
37. Arguably, rigidly applying the strategy of maintaining AAA credit ratings can be counter-productive, particularly where States have a range of important infrastructure projects with high economic value (for example, strong cost/benefit ratios) that need to be undertaken promptly and can generate long-lasting productivity benefits.
38. State and Territory governments may need to take a greater funding role to meet their community expectations. One way to achieve this would be if they recognise that the medium and long-term benefits may be significantly greater than a focus on minimising debt to maintain high credit ratings.
39. Achieving a greater level of infrastructure investment will require States and Territories to undertake well-conceived, well executed and sustained initiatives to recycle capital from existing assets - as well as reforms that drive efficiency across general government operating expenses.
40. State and Territory governments could transfer assets from the government sector to the private sector through privatisation. With assets no longer on the balance sheet, governments would have increased capacity to invest in other projects - particularly by using the proceeds of privatisation. The capital returns from asset sales and efficiency dividends from operational reforms would provide substantial capacity for new infrastructure investment. The privatised assets would be attractive to a range of investors, particularly superannuation funds.
41. Creating room for governments to invest may also be achieved by shifting away from the traditional Commonwealth Government grants-based model for funding infrastructure. This model has been described as the Commonwealth giving 'gifts' to the States with little conditionality and little ability to reclaim direct financial returns. Such grants-based allocations come directly out of the budget bottom line.
42. Grants have traditionally attracted few conditions or requirements and other approaches may allow the Commonwealth to drive significant and positive national reforms to the infrastructure market. Incentivising State and Territory governments to achieve these sorts of difficult reforms may require a re-examination of the established grants-based approach to Federal infrastructure support.

**Figure 4: Three Key Infrastructure Stakeholders**



43. In terms of the interests of stakeholders, then, the objective is to generate a commercial rate of return that will be used to finance the necessary returns to the private sector and take funding pressure off government balance sheets.
44. To complement this, governments would generate funds through the sale and/or better use of their assets while at the same time adjusting their current method of funding to more flexibly approach the allocation of early stage construction and ramp-up risks.
45. It is an obvious understatement to say that this represents a challenging set of issues. Figure 4 provides a visual representation of the interconnected interests of all three stakeholders.

### 1.3 THE FOCUS OF REFORM

46. The focus of the IFWG was on determining the most practical solutions – both in the short term and the long term – that would increase the momentum of the infrastructure market.
47. Figure 5 shows how infrastructure projects can be conceptualised along a spectrum ranging from those that have strong ‘public good’ type characteristics such as public hospitals, to those that are strongly commercial such as a private rail freight project.



Worthwhile projects at both ends of the spectrum generally proceed because there is a compelling case for either governments or the private sector to fund them.

**Figure 5: Spectrum of Infrastructure Projects**



48. The IFWG focused on exploring measures that would encourage the development of these kinds of projects that may currently be sitting at the ‘margin’ of commerciality, or are social projects, to receive required government support. It also considered the scope for reforms and measures to address impediments to greater private sector investment in infrastructure more broadly; that is, to benefit the full spectrum of capital investment.

## 2. SOLUTIONS

49. The IFWG notes that there is no ‘silver bullet’. If there was a simple solution to infrastructure financing and funding it would have been in use by now.
50. The IFWG also notes that many of the options and recommendations in this paper are challenging for governments and the community. The changes proposed in this report are part of a package of complementary measures and reforms that governments should consider if they seek to improve efficiency of the infrastructure asset base.
51. The constraints on available funding increase the importance of robust project assessment, in the context of long-term infrastructure strategies, to ensure the highest value projects are supported.
52. Solutions to capacity constraints across Australia’s infrastructure networks should not be limited to new projects but must include consideration of better utilisation of existing assets, which will involve regulatory and pricing reforms.
53. The IFWG considers that increased investment must be accompanied by a policy reform context toward efficient infrastructure markets and nationally consistent regulatory frameworks in areas like transport, utilities and public services. Figure 6 provides an overview of the reforms discussed in this report.

54. The recommended reforms are consistent with the ‘Commonwealth Infrastructure Investment Framework’ developed by the Department of Infrastructure and Transport (at [Appendix 2](#)).

**Figure 6: Possible reforms to encourage infrastructure investment.**



## 2.1 REFORMS TO INFRASTRUCTURE FUNDING

55. The first area of reform deals with increasing the funding capacity of governments to invest in infrastructure. There are a number of recommendations that seek to raise funds, for instance by monetising assets through user charging. Other reforms are also discussed that require actions from governments at all levels including increasing funds allocated and selling brownfield assets.

## 2.1.1 USER CHARGING AND NETWORK PRICING

56. User charging is a key step in increasing the funding pool for infrastructure investment. User charging is a targeted way of ensuring users who derive the benefits from infrastructure investment, such as a new motorway, rail line or utility asset, make a contribution to the provision, maintenance and operation of that asset.
57. Examples might include a tolled motorway, the use of volumetric water charges or time of day energy charging, which also repay the cost of supporting infrastructure. Determining a user charge would need to take into account factors such as capital costs, wear and tear, maintenance, environmental impacts and congestion.
58. As mentioned, one of the primary impediments to private sector investment in infrastructure relates to the fact that some projects do not offer sufficient returns on investment or do not have revenue streams that would provide for this.
59. Therefore, the IFWG believes the focus of government reforms should be to provide support to those projects at the margins that can attract additional private sector funding by commercialising some part of the project. While alternative options are discussed in this report, the most effective way to do this would be through user charging for economic infrastructure.
60. Implementing user charges would ensure that projects would be in a better position to deliver an adequate level of return and help secure the benefits of ongoing participation of the private sector by leveraging government support through the market.
61. However, the nature of user charging means that it is more applicable to economic (toll roads and ports) rather than social infrastructure projects (schools and hospitals). Furthermore, there may be some extremely large projects where user charges alone will not be able to efficiently fund. In these cases government funding support may be necessary.
62. User charging also provides a framework for thinking about ways to sustainably respond to the infrastructure challenges that result from demographic change, by providing governments and the community with an appreciation of the trade-offs involved.
63. A significant part of the response to this will necessarily involve more careful planning and sound investment decisions by governments. The National Transport Commission has noted that overseas experience suggests that the transport challenges posed by increasing population growth can be addressed through implementation of well-targeted road pricing arrangements and supportive regulatory policies.

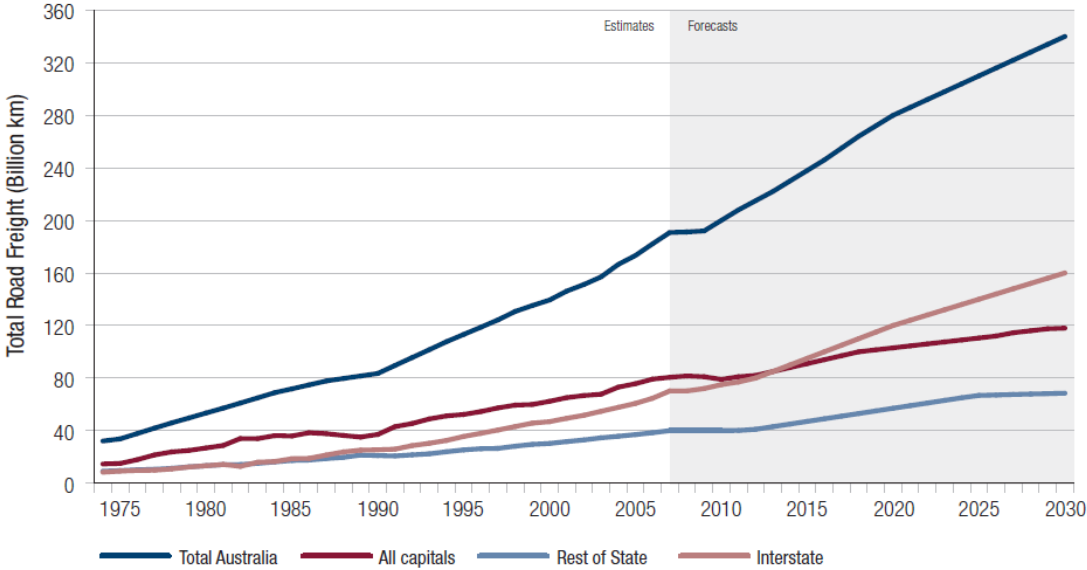
64. Pricing mechanisms such as user charging are already in place in a number of jurisdictions in Australia. If they are designed well, they can lead to better allocation and use of infrastructure resources and hence make a significant contribution to addressing problems such as traffic congestion and bottlenecks.
65. As has been demonstrated in a number of our cities, pricing mechanisms such as user charging can also assist to achieve better outcomes in relation to meeting the increasing demand for infrastructure investment, by creating opportunities for governments to hand over financing responsibility for some of the infrastructure task to the private sector.
66. A network charging regime could also provide consistency and equity for users, as well as appropriate price signals for users to facilitate more efficient outcomes. Currently, user charges are levied on an ad hoc basis, which can result in a network with little apparent rationale for user charges, and contradictory signals for transport choices. A distance based toll may also have greater acceptance rather than a flat fee charged regardless of distance travelled.
67. An example of this is Sydney's road network, where a user travelling from the West can enter from the F5 (free) or the M7 (distance based tolling, capped after 20 kilometres), then the M4/Parramatta Road corridor (free), which leads to the Eastern Distributor (flat toll) and the Harbour Bridge/Tunnel (time of day toll). If user charges were introduced on the complete corridor, this would send a price signal, and could be expected to reduce the number of users as some would switch to other modes of transport.
68. In addition, such a pricing regime would generate additional income for network maintenance and improvement. Implementing charging over an entire network will require governments take into consideration several issues, including for example in the case of Sydney the fact that different roads are managed by different private sector operators.
69. Another form of user charges is a model that focuses on the application of tolls on freight vehicles in order to fund freight-specific road upgrades and bypasses that improve freight efficiency.<sup>6</sup> An example might be a part link or bypass project that is funded exclusively through a toll on freight vehicles.
70. The marginal utility of the toll for the vehicles would include the ability to maintain a higher speed and avoid the fuel consumption and other inefficiencies arising from slowing and accelerating. The benefit to the community arises from less freight traffic and improved amenity. This method has been utilised in Hungary and, to a lesser extent, France and the Netherlands.

---

<sup>6</sup> L. Fraser (2011) "Can Regional Freight Finance Its Own Roads?", *The Challenges of Financing Infrastructure Inaugural Conference*, 19 April.

71. Only one submission commented explicitly on the concept of freight toll roads. It argued somewhat critically that it would be more efficient to allow any vehicle willing to pay the toll to use the toll road rather than exclude non-freight vehicles. However, while this is valid in theory, historically, non-freight demand for regional tollways is very limited. Alternatively, there may be scope for heavy vehicles to be charged a premium relative to smaller or lighter cars. Figure 7 shows the forecast growth in Australia’s freight task by 2030.

**Figure 7: Road freight estimates and forecasts, 1972–2030**



Source: National Transport Commission (2011)

72. A number of the submissions suggested that there is scope for user charging to be applied not only to new infrastructure projects, but also to existing infrastructure assets. On a case-by-case basis, governments should continue to carefully consider the appropriateness of incorporating user-charging elements into new and existing infrastructure projects as a way to improve the operation of infrastructure markets.
73. Overall, the IFWG saw that there was sufficient support to recommend that governments look at various ways to work in partnership with the private sector to explore how contributions from users can be incorporated to assist in the ultimate funding of projects. Notably, this work would involve structuring public infrastructure projects to create revenue streams through targeted measures such as user charging. Achieving a greater role for user charges will necessarily require an informed public debate about the options, opportunities and challenges.

**Recommendation 1:** Governments should implement targeted measures such as user charges to enhance price signals to better balance supply and demand, and to increase the funding available for infrastructure investment.

## 2.1.2 STRATEGIC REVIEW OF BROWNFIELD ASSETS

74. To assist Governments in their assessment of assets, a strategic review of government-owned infrastructure assets should be conducted to identify potential candidates for sale or lease as brownfield assets to the private sector. Such a review should examine the suitability for sale from both an economic efficiency and asset proceeds perspective. Infrastructure classes and assets should be considered for suitability for sale on a case-by-case basis with no predetermined view one way or the other.
75. Infrastructure Australia is already looking at ways to encourage the sale and recycling of government owned infrastructure to fund new projects. The Australian Government should continue to work with State and Territory governments in assessing potential assets for sale and opportunities for better use of existing assets, for example, through pricing of asset use.
76. Conducting a review would require significant agreement and cooperation by State and Territory governments, as they will remain the ultimate decision-makers when it comes to which assets should be sold. However, as a first step, identification of possible assets will encourage a conversation about how they could be better utilised.
77. This course of action would have multiple benefits including harnessing private sector efficiency in infrastructure delivery – putting infrastructure assets in the hands of those who are best placed to manage and operate them. Privatising can lower the cost of service delivery and increase efficiency. It would also work to increase the pipeline of projects. This could potentially expand the pool of funding available for infrastructure projects. It is also likely to be attractive to private sector funds seeking lower risk brownfield investment such as superannuation funds.
78. From a government perspective, asset sales would allow the freed up capital and avoided debt repayments to be invested in new infrastructure.
79. Conducting these audits of surplus assets would not signal an intention either way by jurisdictions, but would allow for an informed public debate about options to free up capital. Importantly, governments must consider whether the value of retaining an asset is worth more than price they receive on the sale.

**Recommendation 2:** State and Territory governments should identify and monetise suitable public assets, allowing the freed up capital and avoided debt repayments to be recycled/invested into infrastructure projects.

### 2.1.3 GOVERNMENT CO-FUNDING

80. The IFWG believes the Australian Government will need to assist State and Territory governments to bring projects to the market by assisting with the funding of infrastructure projects in the short-term. With this in mind the IFWG recommends that the traditional grant-based approach to funding should be augmented with a program of co-funding availability payments from the Australian Government for major Public Private Partnership (PPP) projects, alongside the States and Territories.
81. One of the disadvantages of the Australian Government's grant-based model for funding infrastructure projects is that it lacks appropriate incentives to encourage private sector investment outside of the actual delivery of the project.
82. Furthermore, simply handing State and Territory governments a 'gift' to fund a project, may not give full consideration of the most suitable funding mechanism, such as the introduction of user charges, since funding is guaranteed through the government grant. As a grant is not market-based, it cannot be guaranteed that the project will also be responsive to supply and demand forces. Co-funding availability payments could overcome these issues.
83. Availability payments have often been applied to social infrastructure such as hospitals which have limited capacity for user charges. However, some marginal infrastructure projects which are the focus of this report demonstrate a strong capacity for the application of user charging. The IFWG believes that ideally in these instances the provision of availability payments should be tied to the application of user charging.
84. However, the IFWG noted that a potential limitation of the co-funding model is the impact such payments may have on the Federal Budget. Determining the actual impact of an infrastructure project on the Budget is complicated and depends on the nature of the proposal. The final determination of these classifications rests with the Australian Bureau of Statistics. The IFWG considers further investigation of the Budget treatment is warranted.
85. The issue of the accounting treatment of infrastructure investments has been raised by some stakeholders. Some argue that the classification of investment based on recognising the purchase of an asset upfront, rather than taking into account the future revenue streams an asset may provide, acts to deter or prohibit governments from investing.
86. The lack of consistency between various accounting standards further complicates this issue. Work on determining the most appropriate way to classify infrastructure investments by governments is ongoing. Further details of accounting and budget treatment can be found in [Appendix 3](#).



87. Overall, the IFWG considers that the Australian Government should consider the greater use of alternative funding models, including further investigation of the use of co-funding availability payments alongside State and Territory governments.

**Recommendation 3:** The Australian Government should give a higher priority to infrastructure funding in the immediate-term to achieve positive reforms that will get nationally significant projects to the market in the short-to-medium term.

**Recommendation 4:** For appropriate projects, the Australian Government should consider the greater use of alternative funding models, including co-funding availability payments alongside State and Territory governments.

#### 2.1.4 CAPTURING MORE VALUE FROM INFRASTRUCTURE DEVELOPMENT

88. A few submissions explicitly highlighted a need for investors and governments to capture more value from land developments associated with their infrastructure projects. That is, properties that benefit from investment in infrastructure can make a direct or indirect financial contribution to help to defray the cost of infrastructure. This could aid in delivering commercial returns to investors and enabling governments to access other sources of finance.
89. The key focus for capturing additional value from an investment in infrastructure is from the surrounding land users that are the main beneficiaries from the increased accessibility, and agglomeration economies associated with the infrastructure. This is especially found with rail projects where value increases are usually 20-25 per cent higher around rail lines than away from them.
90. Two notable models of value capture include tax increment financing (TIF) and joint property development. TIF involves offsetting some or all of the cost of developing an infrastructure asset – typically transport infrastructure.
91. As PricewaterhouseCoopers suggest, TIF enables governments to collect additional revenue from increases in values of properties adjacent to new infrastructure projects and use those ‘incremental’ taxes to finance those projects that have resulted in the property appreciation. Property owners still benefit from increased land values.<sup>7</sup>
92. The idea is widely used in the United States, where forty-nine states have adopted statutory frameworks enabling the use of TIF by local governments. In the United Kingdom, the government has announced that it will introduce new borrowing powers to enable authorities to carry out TIF.<sup>8</sup>

---

<sup>7</sup> PricewaterhouseCoopers (April 2008), *Tax Increment Financing to fund infrastructure in Australia, –Draft Report for the Property Council of Australia*

<sup>8</sup> HM Treasury and Infrastructure UK *National Infrastructure Plan 2010*



93. Proponents of TIF argue that it provides a market test around infrastructure selection and assists in providing an upfront and sustained commitment to specified infrastructure provision – helping to ensure long-term funding and planning.<sup>9</sup>
94. However, there are a number of potential drawbacks to TIF. There is an element of uncertainty over TIF revenue returns, and a risk that the expected increment fails to emerge. Moreover, unless governments guarantee the returns, the price of borrowing may be higher than standard government debt.
95. Joint property development (JPD) is where governments partner with private developers to create funding opportunities to assist with building rail transport infrastructure and the surrounding station precincts.
96. JPD enables an infrastructure provider to capture value through the development of adjacent real estate.<sup>10</sup> Under this approach, the infrastructure provider jointly develops the real estate in and around the infrastructure to generate a revenue stream to offset the cost of its provision.
97. Examples of JPD are Chatswood (Sydney), and Melbourne Central where air rights were used to build major retail and residential complexes in exchange for building station precincts. Much more extensive partnerships are the basis of funding opportunities taken in Hong Kong, Tokyo and Singapore to build new rail lines and fund operations of rail systems.
98. It is utilised most notably in the space above urban transport nodes. For example, by Hong Kong’s MTR Corporation, which has developed shopping malls on and around twelve of its stations, with the profits generated allowing the MTR Corporation to reinvest in its network.<sup>11</sup>
99. Further exploration of the viability of this model in the Australian context is required, since factors such as land values and population density are different in Australia compared to overseas markets such as Hong Kong.
100. There were a number of other proposals for reform that were raised through the consultation process, including ‘asset-backed vehicles’ that provide preferential access to infrastructure assets in return for the delivery of asset upgrades. This model has been applied in Europe primarily for area-based regeneration projects.
101. There was also consideration of a model for the private provision of roads where State and Local governments enter into agreements with private users for access and upgrade of secondary roads in rural and remote areas. This is particularly applicable in the case of roads vital for mining operations.

---

<sup>9</sup> PricewaterhouseCoopers (April 2008), *Tax Increment Financing to fund infrastructure in Australia, –Draft Report for the Property Council of Australia*

<sup>10</sup> Infrastructure Australia (2011) *Infrastructure Finance Reform: Issues Paper*

<sup>11</sup> Infrastructure Australia (2011)

102. The IFWG noted the proposals to capture more value from projects to offset some of the costs and suggested that there was some merit in doing more work around their potential use in Australia.

### **Example of an Innovative Financing Option**

London's Crossrail development is a major transport infrastructure project that will provide a new modern railway across London connecting the outer suburbs and Heathrow to the centre of London. It is expected to cost almost £16 billion and will deliver significant economic benefits once operational. Given the size of the financing required to construct the project, the project proponents have used innovative financing solutions to raise the necessary capital.

The proponents have not relied on the traditional financing mechanisms, such as government grants and bank borrowings, and contributions from the private sector made up a significant portion of the overall total financing requirement. The Greater London Authority introduced new development-type charges to raise its contribution. These included a business rate supplement, community infrastructure levy and a local government section 106 contribution. These new measures allowed the Authority to raise funds from new developers and businesses that will directly benefit from the new infrastructure project. There is, however, also the possibility that the stakeholders could use the tax incremental financing model to assist in raising capital.

**Recommendation 5:** Governments should utilise appropriate models to drive revenue from the broader benefits delivered by major infrastructure projects, such as value capture for transport infrastructure.

## **2.1.5 GOVERNMENT BALANCE SHEET REFORM**

103. Major public infrastructure projects in Australia have been predominantly funded by governments, which will continue to be the primary source of funding for the majority of Australia's public infrastructure projects.
104. However, there are increasing challenges in funding large infrastructure projects within the constraints of achieving the highest possible credit ratings and achieving budget surpluses.
105. The Australian Government will need to take a leading role both because it remains the major potential source of funds and to ensure that national objectives can be achieved. The Australian Government's expenditure will need to be supported and complemented by action by State and Territory governments.

106. However, currently most State and Territory governments have little or no capacity on their balance sheets for additional borrowings within the confines of their existing credit ratings.
107. The IFWG noted that States and Territories are likely to face increased borrowing costs in increasingly more volatile capital markets.
108. States have suffered rating downgrades in the past and retained access to capital markets but at an increased cost. For example, a downgrade from AAA to AA+ has been estimated to result in an increased cost of borrowing of up to 50 basis points.
109. For instance, both Tasmania and Queensland have been able to raise sufficient debt after being downgraded to AA+ credit ratings. State and Territory governments should give greater emphasis to investing in infrastructure projects that foster productivity improvements that will in the long-run offset the immediate increase in borrowing costs.
110. As the custodians of the majority of the existing infrastructure stock, State and Territory governments need to improve the efficiency of the infrastructure that they currently hold and consider new approaches to the infrastructure that they will be funding to develop in the future.
111. Optimally, governments should reform their balance sheets to create the capacity to invest in new infrastructure assets. This will involve a combination of sales of existing State infrastructure assets and extending user pays principles/efficient pricing models across the existing range of assets (see sections below for a comprehensive discussion).
112. The Victorian Government is currently undertaking an independent review (Vertigan Review) of its State finances that will consider the State's financial position and recommend strategies to strengthen its overall finances. The NSW Commission of Audit into Public Sector Management has also recently delivered its Interim Report (Schott Report). These are important steps to ensure those States' financial positions will be sustainable in the future and able to meet future infrastructure investment needs. The IFWG believes other States and Territories should initiate similar reviews of their respective financial positions.
113. The IFWG recommends that the Australian Government should consider linking future infrastructure expenditure to State and Territory balance sheet reform as a reward mechanism. Strong government balance sheets will be necessary to increase the capacity to fund new infrastructure projects but also to mitigate against future financial and economic shocks.

**Recommendation 6:** The Australian Government should strengthen its linking of infrastructure funding to State and Territory governments implementing agreed reforms including changes that increase their capacity for investment.

## 2.2 BETTER INVESTMENT PLANNING

114. The IFWG found that long-term planning is crucial to efficiently delivering the infrastructure Australia needs. With this in mind, the second major group of reforms recommend changes to the way governments plan and procure infrastructure projects. This work would guide national infrastructure priorities and expand the investment pipeline.

### 2.2.1 DEVELOPING AN EFFICIENT INFRASTRUCTURE MARKET

115. Australia's infrastructure has largely been treated as a 'pure public good' by governments and the general public for too long, which, due largely to a lack of direct price signals, has led to overuse of the system and public perceptions of a widening infrastructure deficit.

116. Governments have embraced market mechanisms in a limited way in some infrastructure sectors such as freight rail, telecommunications, aviation, electricity and gas markets. However, the IFWG believes that there should be a renewed focus on the efficiency of these and other infrastructure markets.

117. Capacity constraints in infrastructure sectors like freight and logistics, energy and water are having an increasingly adverse impact on national productivity. A period of targeted reform in areas where competitive supply is possible, such as electricity generation, or where regulated monopoly services can be provided more efficiently by the private sector such as electricity transmission and distribution, would allow Australia's governments to liberate significant capital for infrastructure investment, while also underpinning the efficiency of these infrastructure services.

118. While many Australian infrastructure sectors are operating reasonably effectively, several are confronting current or future capacity constraints, service quality or congestion problems, inefficient pricing or other regulatory and efficiency issues. The absence of a competitive infrastructure market in sectors where competitive supply is possible is restricting the provision of infrastructure assets.

119. Many of the challenges identified in submissions to the IFWG highlighted problems with the way in which infrastructure projects are conceived, prioritised and brought to the market.

120. Expanding the pipeline is an important feature of an efficient market and is discussed in more detail below. However, while a national priority pipeline will assist in co-ordination of the stakeholders it is unlikely in itself to create a deal flow for infrastructure investment. A mismatch of financing and project delivery is still likely to exist without the right pre-conditions for private sector investment.

121. A challenge for governments is to ensure that, where appropriate, before projects go to market they are structured in such a way as to make them as commercially effective and attractive as possible. A part of this process involves considering the right mix of direct funding, user charges or other alternative funding mechanisms. The Australian Government can also bring to the table regulatory expertise that can assist in facilitating project development. Importantly, this expertise should be utilised at the point of project implementation to enable the transition from project assessment to delivery.

### **2.2.2 LONG-TERM STRATEGIC PLANNING**

122. Infrastructure investment in Australia has often lacked a strategic approach to planning in order to make fully-informed and cost-effective decisions about our future infrastructure needs. The creation of Infrastructure Australia (and similar institutions in some States such as Infrastructure NSW) has resulted in a significant improvement to national planning.

123. Despite the significant improvement, the IFWG was conscious that merely providing more infrastructure, without due regard to appropriate, long-term coordination across governments would only go part of the way to resolving Australia's infrastructure needs. The IFWG noted that some State governments had either announced or were considering development of longer term plans.

124. Infrastructure NSW for example intends to announce its 20-year plan in 2012, while the Queensland Government released the Queensland Infrastructure Plan in November 2011. The IFWG supports the development of similar longer term infrastructure plans by all States and Territory governments.

125. The Australian Government should leverage off these 20-year infrastructure plans to articulate how State and Territory priorities sit within a nationally significant infrastructure framework and Infrastructure Australia's priority list over a similar 20-year vision. Using the State and Territory plans as a base, the Australian Government could develop a "national network of infrastructure".

126. The network approach would have significant benefits and becomes particularly important when expansion options in existing locations have already been exhausted. Such a plan could also be useful in developing a longer term pipeline of projects and assist in reservation of nationally significant land corridors that will assist future project commencement.

127. A greater emphasis on planning will better place governments to invest in infrastructure once budgetary constraints are eased. An over-arching national plan would also bring together the separate planning processes currently underway, including the National Ports Strategy, National Land Freight Strategy and National Urban Policy.

128. The Council of Australian Governments recognised the importance of strategic long-term planning with its requirement for all jurisdictions to provide detailed infrastructure strategies for Australia's major cities that take into consideration nationally-significant objectives and criteria.<sup>12</sup> The IFWG believes this is a good starting point for further work on a national long-term infrastructure plan.

**Recommendation 7:** Australian governments should prepare 20-year infrastructure strategies, with a common framework and timeframe across jurisdictions, allowing for the development of a clear and strategic national hierarchy of infrastructure plans.

### 2.2.3 DEVELOPING A PIPELINE OF PROJECTS

129. A primary issue that was consistently raised throughout consultations with stakeholders was the lack of a deep, long-term pipeline of infrastructure projects. It was argued that the absence of a sufficient quantity of investment possibilities meant investors did not have certainty. This has created a barrier to investment. Early indication of projects allows the more efficient deployment of capital and resources.
130. The existence of a detailed pipeline of infrastructure projects that reflects the firm forward intentions of governments would undoubtedly help in terms of stakeholders' forward planning commitments and underpin confidence in the industry more broadly. A step towards providing project certainty will be the publication of the recently announced National Infrastructure Construction Schedule (NICS).
131. The NICS will provide information on major infrastructure construction across all levels of government. Work on the NICS is being led by the Australian Government Department of Infrastructure and Transport. It is anticipated that NICS will be operational in the first half of 2012.
132. Additionally, the Infrastructure Australia priority list provides an indication of nationally significant projects that are under development and likely to be considered by governments beyond the intentions already announced and captured in the NICS.
133. Recognising the importance of these issues, Infrastructure Australia was provided with additional funding in the 2011-12 Federal Budget to produce an enhanced list of priority projects, and also to work with governments and the private sector to develop a deeper pipeline of priority infrastructure projects in the Australian market. Work on these initiatives is ongoing.

---

<sup>12</sup> Council of Australian Governments, Meeting Communiqué, 7 December 2009

134. While understanding the need for increased certainty in the industry, the IFWG recognised that the reality of short-term political cycles in Australia remained a practical constraint on providing complete long-term certainty on the investment intentions of governments beyond those projects already announced. However, the IFWG considers that all governments must provide greater clarity on their longer term infrastructure direction to allow the private sector greater certainty.

**Recommendation 8:** Long-term infrastructure strategies should be used to develop a more transparent, robust and funded pipeline of infrastructure projects and must include an early indication of the likely financing and funding sources, enabling the public and private sectors to efficiently deploy capital and resources.

## 2.2.4 REFORMS TO PPP PROCESSES

135. An important way to facilitate increased private sector involvement in the financing of infrastructure projects is to reduce the costs involved in the bidding process. Excessive and unnecessary bid costs directly affect the value for money achieved by governments, with bidders loading these costs into either the pricing of future successful tenders and/or the level of return required within a project.<sup>13</sup> They also act as a deterrent to new entrants, as well as reduce competition amongst existing players for particular projects. Bid costs in Australia are typically between 0.5 to 1.2 per cent of project capital value.<sup>14</sup>
136. Bid costs in Australia have been found to be between 25 to 45 per cent higher than in Canada, which is considered a comparable overseas market. One of the main reasons for this is differences in information requirements. Procurement processes require fully costed solutions supported by detailed information on design, construction, maintenance and financing. As a result, the amount of information required from bidders is significant and can be seen to be excessive.<sup>15</sup>
137. Submissions commented on a number of potential reforms including the need for standard contract documentation and streamlined procurement processes. Submissions argued that substantial costs could be avoided without significant loss of competitive tension by shortlisting fewer parties earlier in the bid process. This way, it is argued, parties not shortlisted can pursue other opportunities rather than incur further costs fruitlessly.

---

<sup>13</sup> KPMG (2010) PPP Procurement: Review of Barriers to Competition and Efficiency in the Procurement of PPP Projects

<sup>14</sup> Infrastructure Australia (2011) Infrastructure Finance Reform: Issues Paper

<sup>15</sup> KPMG (2010)



138. In some areas of procurement reform, the IFWG noted the work being advanced on the National Public Private Partnership (PPP) Guidelines that will address these concerns.
139. More substantively, the IFWG thought that a possible method to reduce bid costs for private sector participants is to centralise the procurement of common information requirements, such as geotechnical surveys. There could be significant efficiency gains if governments facilitated the completion of common analysis required as part of the bidding process, through minimising the unnecessary duplication of effort and costs required to carry out analysis that is common to all participants.
140. In addition, increased competition amongst bidders derived from lower bid costs should lead to governments achieving better value for money.
141. Some submissions noted that Australian project deal flow is characterised by fewer projects that are much larger in size than those in comparable overseas markets. One suggestion for reform is to unbundle large projects into smaller discrete parts, where it is efficient to do so, in order to increase deal flow and enhance the stock of expertise among stakeholders.
142. The National PPP Guidelines explicitly call for recognition of the impact that very large projects can have on market appetite and competition. Bundling has only occurred where it is appropriate and governments have enjoyed significant efficiencies as a result. The reforms outlined above would go some way to make the delivery of smaller PPPs cost effective for both industry and government.

**Recommendation 9:** Governments should reduce procurement costs and coordinate procurements across jurisdictions.

## 2.2.5 BENEFIT-COST ANALYSIS

143. Taking a long-term view of Australia's future infrastructure needs requires not only strategic planning and a deep pipeline of projects, but also a robust framework for assessing nationally significant infrastructure proposals. Infrastructure Australia's *Reform and Investment Framework* provides a useful tool for considering the relative merits of infrastructure proposals and uses an assessment methodology incorporating a requirement for thorough benefit-cost analysis.



144. Greater emphasis on the use of benefit-cost analysis would assist governments to better prioritise projects. It would also help governments to better explain its priorities to the community. In this regard, the 2011-12 Federal Budget included measures to enable Infrastructure Australia to publish more information about their assessment of projects, including benefit-cost analyses. More work could be done to refine techniques to make benefit-cost analysis more robust.

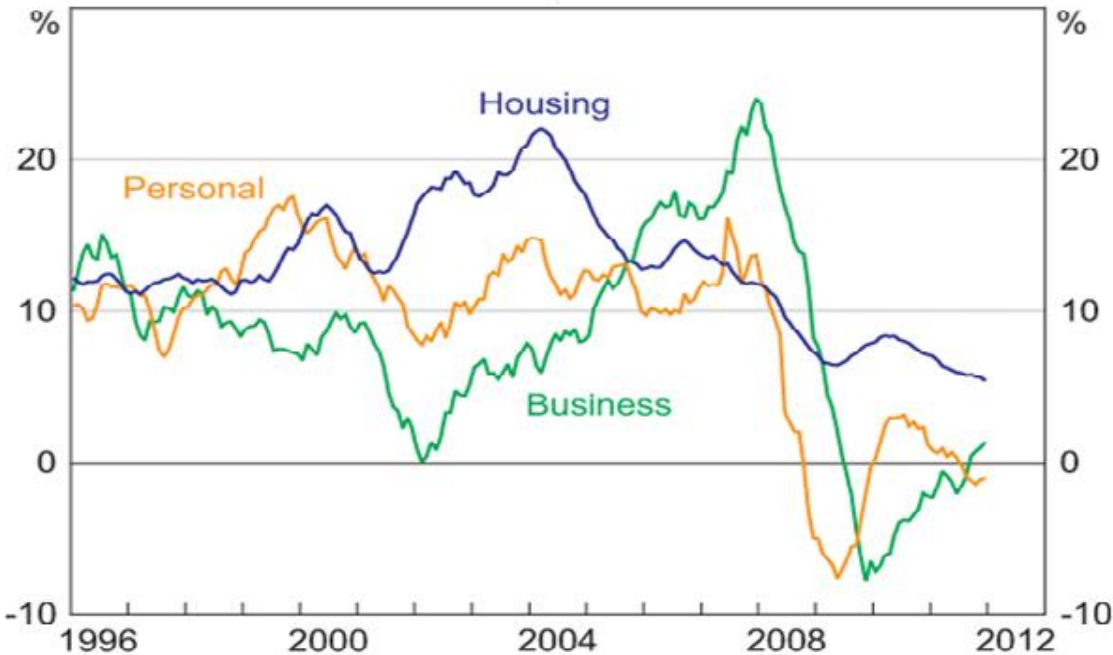
## 2.3 DEVELOPING A MORE EFFICIENT MARKET

145. While the reforms discussed in the previous sections dealt with funding solutions for projects at the margin of commerciality that can deliver high net public benefits, the IFWG also recognised that broader reforms were necessary to address other inefficiencies and barriers to private sector investment in infrastructure. This section considers a number of reforms that governments could apply to address concerns raised about private investment in infrastructure projects more broadly, including risk allocation and superannuation industry investment.

### 2.3.1 GOVERNMENT FINANCING ASSISTANCE

146. Sustained turbulence in capital markets means the cost and availability of capital continues to be relatively high, particularly following the GFC. For instance Figure 8 shows a sharp reduction in credit flows especially to businesses. Therefore, the IFWG believes governments should be flexible in the type of assistance to accommodate the financing needs of the project proponent.

**Figure 8: Credit Growth by Sector (Year Ended)**



Source: Reserve Bank of Australia

147. The IFWG discussed a range of mechanisms to achieve this outcome. It could take the form of absorbing greater financing or demand risks during the ramp-up stage of the project. Alternatively, governments could provide financial assistance to reduce overall borrowing costs or to supplement any financing shortfall by providing start-up capital if a project proponent has difficulties in obtaining financing. Governments could provide a cap and collar on the level of assistance they provide.
148. Significantly, the IFWG noted that the rate at which debt assistance can be provided could vary from concessional terms to a fully commercial basis, which will, in turn, impact on the way assistance is treated in government budgets. Government debt should be equally ranking so that private sector partners also share in any losses. This type of financing support could be modelled on the successful program in the United States known as the Transportation Infrastructure Finance and Innovation Act.
149. Leveraging government balance sheets for this type of support is only appropriate in the absence of commercial options from the market and where there is a reasonable expectation that loans would be repaid and/or government equity contributions can be subsequently 'released'. Importantly, assistance must not 'crowd out' opportunities for the private market to operate efficiently.
150. Furthermore, the appropriate form of government assistance must be considered on a project-by-project basis. There is no one-size-fits-all model as different projects will have diverse requirements.
151. While government financing assistance in these circumstances may offer substantive benefits and opportunities to get projects off the ground that would not otherwise proceed, it was clear through the consultation process that support for such measures in the Australian context was not universal.
152. Implementing a flexible government assistance package will lower the infrastructure cost for the community. It will also help to establish a diverse infrastructure market, which will help to create incentives for greater investment and involvement by the private sector and superannuation funds.

### **2.3.2 RISK ALLOCATION**

153. Large economic infrastructure projects are inherently risky. Risk identification and allocation is a key outcome for any infrastructure project. It is important that project risks are allocated to the party best able to control and manage them.
154. Over the past several decades, Australia has embraced a range of contracting models which seek to efficiently apportion risk between government and the private sector. Models which transfer project risks away from taxpayers, such as PPPs and fixed price construction contracts, ensure that the public sector is protected from cost overruns and other negative outcomes.

155. While the allocation of most project risks are well understood and established, more recently, some private sector investors have claimed that they are less willing to accept certain greenfield risks following the negative experience of investors in several large well-known infrastructure projects in Australia. This has become an impediment to greater private sector involvement, particularly from the superannuation industry.
156. As a result, there is reluctance among private sector investors to bid for projects where there is a significant degree of market risk – with a risk premium applied by those who are prepared to do so.
157. While the Federal Department of Infrastructure and Transport is working on addressing issues in patronage forecasting<sup>16</sup>, the IFWG believes that in order to address the changed risk environment, governments should consider adopting a more flexible approach to the allocation of risk between the public and private sectors.
158. This could involve the governments reconsidering the kind of risks they are willing to take on – which could include accepting some of the demand or financing related risks for infrastructure projects.

### *Demand Risk*

159. For motorways, this could involve government offsetting some of the patronage risks by offering a service payment based on a guaranteed traffic volume or making a contribution for projects whose costs exceed the ability of user charges to support its funding. Likewise, governments could take on some of the risk during the ramp-up stage of the project to cover some of the early financing commitments. This should be sufficient to entice greater private sector involvement.

**Recommendation 10:** Governments should take a more flexible approach to the allocation of risk, including demand risk, for high net public benefit projects that have the capacity to generate revenue streams from users.

### *Refinancing Risk*

160. The reluctance to engage with certain market risks has been further underpinned by uncertainty in global capital markets, the withdrawal of credit insurers, more stringent global regulatory standards for capital adequacy and the retreat of foreign banks. In this environment refinancing risks may also arise and act as an additional impediment on infrastructure financing in the short term.

---

<sup>16</sup> Department of Infrastructure and Transport, *Addressing Issues in Patronage Forecasting for PPP/Toll Roads*, Consultation Paper, February 2012.

161. If flexible risk allocation between the public and private sectors is done effectively, government balance sheets could be freed-up as fewer resources will need to be allocated to infrastructure investment and ultimately increase the number of infrastructure projects being built.

**Recommendation 11:** In the short term, governments should adopt a flexible approach to refinancing risks, as the tenor and cost of debt pose an ongoing challenge to greater involvement by the private sector in the financing of infrastructure.

### 2.3.3 SUPERANNUATION FUNDS INVESTMENTS IN INFRASTRUCTURE

162. Australian superannuation funds have a long history of investing directly and indirectly in infrastructure assets across various stages of the PPP lifecycle, in both greenfield and brownfield assets, and in operating assets that have been privatised such as airports. This is largely a function of the match between a superannuation fund's long-dated liabilities and infrastructure's long-term stable earning streams.
163. However, there is a significant amount of debate on whether superannuation funds are doing enough to support infrastructure investment with a perceived low level of infrastructure assets held by the superannuation industry compared to the size of the industry. As at 30 June 2011, the value of total assets under management by superannuation funds was around \$1.34 trillion – and this is forecast to grow to at least \$3 trillion over the next 10 years.
164. Available evidence suggests Australian superannuation funds invest around five per cent of their assets in infrastructure. However, the actual allocation may be less as the Association of Superannuation Funds of Australia indicates only one third of superannuation funds invest in infrastructure assets and general allocation ranges between two and ten per cent<sup>17</sup>.
165. In addition to the general obstacles raised above, there are a number of specific impediments that restrict superannuation fund investment in infrastructure. In particular, the IFWG understands there are real barriers for many small-to-medium superannuation funds that do not have the scale to achieve sufficient diversification to invest in infrastructure assets, the capacity to undertake due diligence or the in-house skills to evaluate investment decisions. Self-Managed Superannuation Funds (SMSFs) in particular are an unrealised opportunity to increase fund investment in infrastructure.

---

<sup>17</sup> Challenges of Financing Infrastructure, ASFA Paper, May 2011.

166. The IFWG considers that the Australian Government should encourage the creation of investment products that suit the needs of smaller investors. The IFWG also believes that the superannuation industry should investigate expanding opportunities to aggregate the resources of smaller funds and conduct due diligence analysis on infrastructure projects.
167. This is consistent with a key finding of the *Cooper Review* into the superannuation sector, which recommended fewer and larger super funds. This would then give more superannuation funds the necessary scale and power to buy large unlisted assets, such as infrastructure, or participate in greenfield projects. However, there are a number of regulatory barriers preventing the consolidation of superannuation.
168. Of course, the divestment of established brownfield assets discussed above represents perhaps the most meaningful opportunity to harness a greater level of superannuation participation in infrastructure assets. This in turn liberates invested public capital to support new, greenfield projects.
169. Liquidity constraints resulting from reforms allowing greater member choice also impedes greater infrastructure investment by superannuation funds as they must maintain sufficient liquidity to finance short-term redemptions.
170. Retirement income products such as annuities offer opportunities to reduce this impediment by better matching the appetites of fund beneficiaries with the long-run returns offered by infrastructure investments. Annuities can also help to deal with the challenge of longevity risk.
171. Another issue potentially restricting the flow of investment funds into infrastructure assets is the limitations on the type of alternative products that superannuation funds can hold in their post retirement years. Currently retirees have three options available including taking a lump sum payment on retirement (which can be invested by the individual), a pension or an annuity. A significant public policy question is whether individuals will continue to invest in growth assets through retirement.
172. The way in which retirement income products are structured can influence the demand for long-term infrastructure investments.
173. However there are currently regulatory provisions that restrict the development of retirement income products. In particular Income Ruling IT 2480 and SIS regulation 1.06 (2) assume that products are either account-based or a pension, and do not deal well with products that have elements of each or have certain benefits that are deferred. Withdrawal or amendment of the Ruling and the SIS Regulation would assist both the development and marketing of products.
174. The IFWG notes that the Australian Prudential Regulation Authority remains cautious about the holding of illiquid assets and should be more flexible to allow for investments in more diverse assets such as infrastructure.

175. The Australian Government gave an undertaking following its 2011 Tax Forum, that it would review longevity risk products. The Superannuation Roundtable was established in January 2012 to consider ideas raised at the Tax Forum for providing Australians with more options in retirement and improving certain superannuation concessions.
176. The IFWG suggests that as part of that review, the Government may wish to also consider the structure, regulation and taxation of retirement income products and the way in which they may impact on the demand for long-term investments including infrastructure.
177. There may be scope for governments to investigate mechanisms through which long-term equity investors, such as superannuation funds, can participate in the market more actively at an earlier stage.
178. The IFWG noted the UK Government's recent announcement of a memorandum of understanding (MOU) between its Treasury and large pension funds. The MOU establishes a framework to facilitate the development of a new investment platform to help pension funds invest more in infrastructure. The IFWG believes that the Australian Government should monitor the progress of this initiative as it develops.
179. Mandating superannuation funds to allocate a certain percentage of their assets into infrastructure investments has been raised as a mechanism for increasing the overall contribution of the superannuation industry to funding Australia's infrastructure need. The IFWG ruled out unequivocally the introduction of a mandated level of investment and agreed with the Super System Review recommendation that investment decisions are a matter for trustees.

**Recommendation 12:** To encourage financial institutions such as superannuation funds to further invest in long-term assets such as infrastructure, the Australian Government should examine the structure, regulation and taxation of retirement income products and the way in which they may impact on the demand for long-term investments.

### 2.3.4 PRIVATE BOND MARKET

180. The availability, cost and tenor of debt is likely to continue to be a challenge for the Australian economy generally, and infrastructure finance specifically.
181. An active commercial bond market can play a role in diversifying the sources of debt available to Australian businesses – with corollary benefits for infrastructure projects seeking debt finance.
182. Competition between banks and the bond market creates better pricing and terms in both markets. A number of submissions noted the importance of such a market in



increasing the aggregate pool of resources devoted to infrastructure projects more generally.

183. Commercial bonds for infrastructure entities may be attractive to smaller investors with a long-term investment horizon as they would be underpinned by projects that have the capacity to generate strong revenue streams.
184. Importantly, these bonds would be long-dated to match the life cycle of a typical infrastructure project, limiting the refinancing risk.
185. In order for bonds to become a viable financing option for infrastructure it is necessary to address the fact that Australia does not have a deep and liquid corporate bond market.
186. As part of the 2011-12 Federal Budget, the Australian Office of Financial Management (AOFM) announced its plans to extend the Treasury Bond yield curve out to 15 years. This may be achieved in a manner consistent with prudent sovereign debt management over the coming years depending on market conditions. Extending the yield curve will allow a better match with the long-term nature of infrastructure products.
187. Governments can issue bonds themselves as a way to raise funds for infrastructure projects. Indeed, the NSW Government has recently announced the establishment of Waratah Bonds as a way to finance its State infrastructure fund – Restart NSW.
188. A number of submissions noted that the existence of a government-issued infrastructure bond market can help to create a pricing benchmark for privately issued bonds. Moreover, longer dated infrastructure bonds can be a good match for the requirements of investors such as superannuation funds.
189. Any consideration of the Commonwealth Government issuing bonds for infrastructure purposes needs to bear in mind that the issuance of bonds would increase the Commonwealth debt, which is contrary to the current fiscal strategy. Funding of infrastructure projects would also increase the Commonwealth's cost of raising its debt through reducing the AOFM flexibility in managing the Commonwealth's debt portfolio.
190. Alternatively, there have been some suggestions from industry that the Commonwealth could support the issuing of infrastructure bonds whereby the Commonwealth authorises private entities to issue bonds which contain a form of Commonwealth assistance, generally a tax offset or rebate.
191. There have been two previous Commonwealth-supported bond schemes, Develop Australia Bonds (DAB), and the Infrastructure Borrowings Tax Offset Scheme (IBTOS). There were significant issues with both of these schemes and they were both withdrawn by the Australian Government. Therefore, providing such assistance for private issuance of infrastructure bonds is not efficient, nor warranted.

192. The 2009 Johnson Report on 'Australia as a Financial Centre: Building on our Strengths', discussed the lack of liquidity and diversity in Australia's corporate bond market. While noting that many of the reasons why the market is not particularly liquid or diverse are more structural in nature, there were concerns that the costs associated with issuing debt securities to retail investors discourage such issues and make it difficult to compete with bank deposits and other asset classes.
193. While ASIC has recently provided class order relief for the issue of 'vanilla' corporate bonds to retail investors, to date only one issuer has explicitly relied on this relief to issue bonds. Therefore, there may be merit at looking further at the barriers to corporate bond issuance.
194. Noting that some of these costs and burdens relate to disclosure, certain issuers could be permitted to use a short retail corporate bonds prospectus. This would include investigating the appropriate tenor of bonds that are allowed to be issued under such prospectus; and examining what the appropriate liability regime should be for the issuance of such bonds that satisfy the criteria.
195. Some of these issues were explored at the Australian Government Corporate Bond Roundtable that was held at the end of 2011. The Australian Treasury also released a discussion paper in December 2011 on the 'Development of the Retail Corporate Bond Market: Streamlining Disclosure and Liability Requirements'. Accessing retail investors augments the pool of financing sources.
196. While the focus of regulatory reform has been on retail participation in domestic bond markets, the IFWG noted that the volume and tenor required to support the infrastructure spend is likely to be largely provided by institutional investors. The reforms mentioned in section 2.3.3 may also assist in stimulating the appetite of institutional investors for bonds.

**Recommendation 13:** The Australian Government should remove unnecessary regulatory barriers that currently impede retail corporate bond issuance in Australia as a way to diversify the sources of debt.

## 2.3.5 TAXATION TREATMENT OF INFRASTRUCTURE INVESTMENTS

197. Infrastructure projects are, by their nature, long-term undertakings and often tend not to generate profits for several years. Under current taxation arrangements, losses generated by projects are accumulated and carried forward to later income years awaiting the receipt of income. It has been argued that improving the utilisation of investment losses would be appealing to private sector investors.
198. In response to this, the 2011-12 Federal Budget contained a measure to amend the taxation legislation to enable losses for designated infrastructure projects to be



uplifted at the government bond rate to ensure their value is maintained. Those losses will also be exempt from the continuity of ownership test and the same business test to recognise that project owners change over time.

199. While this measure has been broadly welcomed, a number of submissions raised the possibility of allowing investors to bring forward the ability to claim losses as a way to further encourage investment in infrastructure. From a tax policy perspective this would represent a desirable reform, however, there would be significant budgetary implications and some implementation difficulties would need to be resolved.
200. If governments were inclined to intervene in infrastructure markets to improve the profitability of marginal projects, it is preferable to do this by way of grants rather than through the taxation system. Direct grants tend to be more transparent and certainly less distortionary and complex than seeking to amend broadly applicable taxation provisions to target certain industries or projects.
201. Following the Australian Government's Tax Forum in 2011, the Business Tax Working Group was established and is currently examining the treatment of business losses. The Working Group has completed its interim report and is currently consulting with businesses and the wider community. Public consultation will help to inform the final report that is expected by mid-2012. The IFWG believes that it was most appropriate to allow this process to be finalised.
202. In summary, however, as the 2011-12 Budget measures are still to be implemented and there is consideration of other taxation measures underway, the IFWG considers that the implications of these actions should be assessed before additional taxation measures are proposed. This includes measures that promote improved utilisation of infrastructure investment losses as a way of increasing the attractiveness of infrastructure projects to the private sector.

### **2.3.6 INFRASTRUCTURE FUND**

203. The IFWG considered the possibility of an investment vehicle through which governments could channel support for worthwhile infrastructure projects in a way that maximised the involvement of the private sector. One option that was canvassed was the establishment of an infrastructure fund or infrastructure bank. Such an institution would provide assistance by way of debt financing support, investment in private sector issued securities, or provide equity injections.
204. There are several international examples of similar institutions including the European Investment Bank, the proposed National Infrastructure Development Bank in the United States, or the Public Private Partnership (P3) Canada fund.
205. If governments proceeded with establishing a fund, detailed consideration would need to be given to how it would be funded and governed, including ensuring adequate resourcing with the necessary level of expertise.

206. The fund would also need to have robust project selection guidelines and processes, including decision-making criteria.
207. However, on balance the IFWG does not support such an approach to deal with the Australian infrastructure requirement. The IFWG considers that an infrastructure fund risks ‘crowding out’ private financing institutions.
208. This option was also discounted because the consultation process indicated that there was little support from the private sector to formally partner with the government through an infrastructure fund.

### 3. CONCLUSION

209. This report has presented a number of significant reforms that can be made to infrastructure financing and funding. They are the result of a significant consultation process with stakeholders, as well as careful deliberation amongst the members of the IFWG.
210. In preparing the recommendations, it became apparent to the IFWG that there were three key issues which consistently arose. These were:
- A requirement for all stakeholders to commit to undertake long-term planning of infrastructure needs, which will help to identify a pipeline of priority infrastructure projects and create a deal flow.
  - Governments need to increase the headroom in their budgets to allocate more capital to infrastructure spending through more efficient use of current and future infrastructure. There is also the need for project funding reforms based on flexible government funding assistance to help project proponents during the project start-up phase.
  - Governments should implement a series of structural reforms at the project level to encourage private sector funding. This could involve taking a more flexible approach in mitigating project risk through to more efficient PPP bid processes.
211. The Australian Government should consider giving greater priority to infrastructure spending, for example, through additional co-funding with State and Territory governments. This may become more achievable with improving fiscal conditions.
212. For the recommendations to make a difference, governments and the private sector need to work together to better ‘match’ supply of financing and funding for infrastructure projects – but, they will need to be in the interests of all stakeholders. This will include large scale investors such as the banks, but also smaller investors such as smaller superannuation funds and possibly even down to ‘mum and dad’ investors who are looking for a stable and secure long-term investment.

213. Ultimately, the key test of the recommendations is whether they will result in additional infrastructure investment from the private sector which will, in turn, lead to the construction of additional nationally significant infrastructure.
214. The current Infrastructure Australia Priority List has a number of projects that may benefit from additional investment on a commercial basis. These are essentially projects which have some capacity to generate revenue, and which would benefit from the application of market principles to improve their construction and operation.
215. Projects on the current Infrastructure Australia priority list that could be supported are:
- Moorebank Intermodal Terminal;
  - Darwin East Arm Port Expansion;
  - M4 Extension;
  - M5 East Upgrade;
  - Freight access to Port of Melbourne – Westlink; and
  - Northern Sydney Freight access – F3 – M2 Link.
216. Appendix 4 includes a number of successfully completed infrastructure projects based on a range of financing and funding models.
217. In addition to the projects currently on the priority list, there are likely to be other projects that could be assisted by the recommendations. These could include large infrastructure projects where financing is limited because of tight credit availability. Projects potentially in this category could include ‘common-use’ aspects of the Oakajee Port project in Western Australia or the Brisbane second runway proposal.
218. Appendix 5 provides further details about the ways that some of the recommendations under each of the three themes in the report can be actioned.
219. Critical to successfully tackling the infrastructure deficit is for all stakeholders to recognise that productive infrastructure is an investment, not a cost. Investment in productive infrastructure represents an investment in our future. It will contribute to wealth generation and a consequent improvement in our quality of life. Conversely, a failure to make timely investment in infrastructure will reduce our productivity, reduce our global competitiveness, and lead to a reduction in living standards.
220. With the presentation of this Report to the Infrastructure Australia Council, the official work of the IFWG has now come to an end. The Infrastructure Australia Council is invited to consider the Report.

## APPENDIX 1: 2011-12 FEDERAL BUDGET MEASURES

The 2011-12 Federal Budget contained several measures that were aimed at promoting private investment in infrastructure by establishing tax provisions for infrastructure projects designated to be of national significance.

The IFWG considered two key features of the Infrastructure Investment Incentive Package:

- Amendments to the taxation legislation to enable losses for designated infrastructure projects to be uplifted at the government bond rate to ensure their value is maintained. Those losses will also be exempt from the continuity of ownership test and the same business test to recognise that project owners change over time.
  - The IFWG noted that consultation was undertaken by the Australian Treasury regarding the implementation of this reform between October and December 2011.<sup>18</sup>
  - Following the Australian Government's Tax Forum in 2011, the Business Tax Working Group was established and is currently examining the treatment of business losses. The IFWG noted that the Business Tax Working Group is expected to report by mid-2012.<sup>19</sup>
- The development of the National Infrastructure Construction Schedule (NICS).
  - The IFWG noted that work on the NICS is being led by the Australian Government Department of Infrastructure and Transport. It is anticipated that NICS will be operational in the first half of 2012.

---

<sup>18</sup> The Australian Treasury Discussion Paper *Tax Loss Incentive for Designated Infrastructure Projects* can be found at: <http://www.treasury.gov.au/contentitem.asp?NavId=037&ContentID=2194>

<sup>19</sup> More information on the Business Tax Working Group can be found at: [http://www.treasury.gov.au/content/business\\_tax\\_wg.asp?NavID=022&ContentID=2204](http://www.treasury.gov.au/content/business_tax_wg.asp?NavID=022&ContentID=2204)

## **APPENDIX 2: THE COMMONWEALTH'S INFRASTRUCTURE INVESTMENT FRAMEWORK**

The Principles below enunciate the Government's current framework for infrastructure investment.

### **Principles to Address Reforms to the Infrastructure Market**

- a. The Commonwealth will encourage efficient investment in and use of infrastructure through better functioning price signals
- b. The Commonwealth will facilitate a transparent and deep infrastructure pipeline in order to reduce uncertainty and encourage private sector investment
- c. The Commonwealth will encourage greater private sector involvement in infrastructure including by: ensuring that all proposed projects are fully tested for the scope for private funding; and reducing barriers to entry for domestic and international market entrants in the construction and operation sectors

### **Principles to Maximise Benefits from Government Infrastructure Investment**

- d. Infrastructure investment decisions will be consistent with relevant planning and reform agendas, with emphasis on major projects that deliver high economic benefits pursuant to a thorough business case appraisal of project proposals, including the use of cost benefit analysis
- e. Commonwealth infrastructure investment will be consistent with the Government's overall macroeconomic policies and its fiscal strategy
- f. Commonwealth investment in economic infrastructure will focus on nationally significant infrastructure that leads to the greatest productivity returns
- g. Commonwealth infrastructure investment will leverage progress by the State and Territory governments on the national reform agenda (such as capital cities strategic planning and national regulatory reforms)
- h. The Commonwealth will place increased emphasis on project implementation issues upfront in the funding decision process, including examining potential for private sector involvement, procurement and delivery options and financing options

## APPENDIX 3: ACCOUNTING AND BUDGET TREATMENT OF GOVERNMENT INFRASTRUCTURE INVESTMENTS

In Australia, the way in which governments classify infrastructure investments for the purpose of preparing their budget statements is determined by reference to a number of accounting standards including:

- the Australian system of Government Finance Statistics (GFS) compiled by the Australian Bureau of Statistics;
- Australian Accounting Standards Board; and
- International Public Sector Accounting Standards.

However, despite the existence of these standards there is currently no definitive method used to account for infrastructure investments. Moreover, determining the actual impact of an infrastructure project on a government budget can be extremely complicated and will depend on the individual nature of each proposal assessed on a case-by-case basis.

This appendix briefly considers the accounting treatment of three types of payments that can be made by the Australian Government to deliver infrastructure projects – grants, loans and availability payments.

### **Government Grants**

The most common method for the Commonwealth Government to provide financial assistance to support infrastructure projects is through a grant, where public money is paid directly to a recipient in return for construction of an infrastructure asset. A grant can take a variety of forms, including a payment made on a one-off or ad hoc basis, and usually does not entail any return on investment for the Government. Broadly speaking, a grant will have a negative impact on the underlying cash balance, fiscal balance and net debt. If the government is required to raise funds to pay for the grant through a Commonwealth Government Securities issuance, then this will also result in an increase in gross debt.

### **Government Loans**

In contrast to grants, government loans are provided with the expectation that the recipient of a loan will agree to repay that sum in the future. Government loans can be provided on a commercial basis at terms equivalent to those available in the marketplace or the government could provide loans at a concession. The choice between the two will determine the budget impact. In either case loans, as financial assets, do not have a direct impact on the underlying cash balance. The repayment of loan principal will have no net impact as it is replacing one financial asset (a loan) with another (cash). However, there will be an impact on the underlying cash balance, fiscal balance and net debt as a result of net interest costs. The net impact will differ based on whether the loan is commercial (positive) or concessional (negative).

## Availability Payments

Much like the accounting treatment of grants and loans, the classification of an availability payment on government budgets will depend on the specific project details, taking into considerations for example how a project is financed. Therefore, availability payments will need to be examined on a case-by-case basis. The main test to be considered according to accounting policy is whether the government controls the arrangement such as with a service concession, or whether it assumes most of the risks and rewards from a project as with a finance lease. If either of these situations is true then the arrangement will appear on the government's balance sheet.

Generally, availability payments are single payments that cover a range of these purposes, and the accounting standards require the payment to be split into capital and operating components based on the relative value of the components. The basic principles applied by the Commonwealth to budget accounting for Public Private Partnerships (PPPs) are:

- The proportion of availability payments that relate to service elements would be expensed, most likely over the period to which they relate. This would have a negative impact on fiscal balance, underlying cash balance and net debt.
- The proportion of availability payments that relate to the acquisition or construction of an asset would be capitalised. This would increase the value of the asset and the related liability on the government's balance sheet. While the accounting standards applying in Australia for the capital component have not been finalised, it is most likely that the capital value would be recorded in a similar way to a finance lease, and thus have a full 'up-front' impact on the fiscal balance, underlying cash balance and net debt.

The issue in relation to infrastructure investment is whether economic PPP projects should be recorded on government balance sheets. According to the Productivity Commission: "Off balance sheet accounting can obscure the level of government liabilities or fiscal costs required to meet future PPP contractual service payments and guarantees."<sup>20</sup> Work on determining the most appropriate way to classify infrastructure investment by governments is ongoing.

---

<sup>20</sup> Chan, C., Forwood, D., Roper, H., and Sayers, C. 2009, Public Infrastructure Financing – An International Perspective, Productivity Commission Staff Working Paper, March 2009



## APPENDIX 4: EXAMPLES OF SUCCESSFULLY FINANCED AND FUNDED INFRASTRUCTURE PROJECTS

### 1. WESTLINK M7

The Westlink M7 motorway project in Sydney is widely regarded as a successful example of a Public Private Partnership. The estimated cost was approximately \$1.54 billion, with the Australian Government contributing \$360 million. The Westlink Motorway consortium selected to operate and maintain the M7 was provided with a 34-year concession term after which the asset will revert to the NSW Government. Construction started in July 2003 and the road was opened to traffic in December 2005.

The M7 demonstrates what can happen when governments effectively plan for the long term, efficiently share risks and incorporate appropriate price signals into infrastructure projects through user charging. For the M7 this is implemented by electronic tolling with the price of the toll capped in real terms. There may be scope to extend the tolling operation at the end of the concession. Another important feature of the project is that the NSW Government also shares in upside demand risk where actual revenue exceeds forecast revenue. This project has led to the building of a substantial piece of well-utilised infrastructure largely financed by the private sector.

### 2. Port of Brisbane

In November 2010 the Queensland Government successfully sold a 99-year lease for the Port of Brisbane as part of the Queensland Asset Sales program. The consortium Q Port Holdings paid \$2.1 billion. Q Port Holdings includes major stakeholders Global Infrastructure Partners (GIP), Industry Funds Management (IFM) and funds managed by QIC Limited (QIC). As part of the sale process, the Queensland Government transferred all equipment and machinery, including the dredging fleet, all employees of the Port of Brisbane Corporation, and the operating rights associated with the Port of Brisbane to a new operating company – the Port of Brisbane Pty Ltd.

The privatisation of Australia's fastest growing container port was notable on a number of fronts including because the structure of the transaction saw the new owners committed to investing approximately \$200 million to upgrade the Port of Brisbane Motorway in addition to the purchase price.

Privatisations of this kind enables private sector efficiencies in operation and are an example of the way in which proceeds from asset sales can be recycled, freeing up additional public capital for other projects. Announced as part of the *Renewing Queensland Plan* the sale has enabled the Queensland Government to maintain its building program, amongst other investments, following significant budgetary challenges presented by the global financial crisis.



### 3. Australian Rail Track Corporation

The Australian Rail Track Corporation (ARTC) commenced operations in 1998 to provide a 'one-stop shop' for rail operators seeking access to the National interstate rail network. The ARTC improves the efficiency and performance of the interstate rail track by leasing the above rail capacity of its network on a commercial basis. The Australian Government holds a substantial equity stake in the ARTC and as part of the 2010-11 Commonwealth Budget invested almost \$1 billion in the ARTC to fund a package of productivity enhancing rail projects.

The ARTC is an example of an equity-based model for delivering infrastructure. Here, the public sector finances all or a large part of a project at a rate of return which is more than the Government's cost of capital but less than the rate available in the commercial market. One of the main benefits of this approach is that there is the possibility of some direct financial return on a government investment. This is unlike the grants-based model. In the 2009-10 financial year the ARTC returned \$94.3 million to its equity holders on its total equity of \$2.5 billion.

### 4. Peninsula Link

Peninsula Link will be the first road project in Australia delivered under an availability payments based Public Private Partnership (PPP). When the Peninsula Link project is delivered in early 2013 it will provide an additional 27 kilometres of freeway-standard road and link Carrum Downs to Mt Martha in just 17 minutes - a saving of 40 minutes. Under the PPP agreement the Southern Way Consortium will finance, build and operate the \$759 million road. The Victorian Government will make periodic payments on the toll-free road for 25 years and thereby offset significant patronage risks. This is an example of an important piece of infrastructure being largely financed by the private sector but funded by the government. Arguably the project could have delivered more benefits if the government had chosen to toll the road to pay for it - or at least offset the cost of its funding on the budget.

### 5. International Case Study: The Transportation Infrastructure Finance and Innovation Act

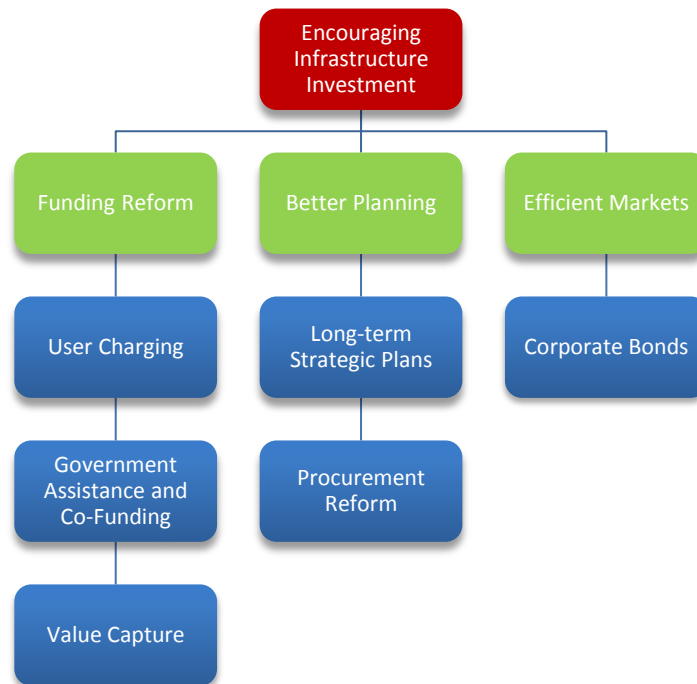
The Transportation Infrastructure Finance and Innovation Act (TIFIA) is a United States Government program that provides credit assistance for qualified projects of regional and national significance. Many large-scale, surface transportation projects - highway, transit, railroad, intermodal freight, and port access - are eligible for assistance. Eligible applicants include state and local governments, transit agencies, railroad companies, special authorities, special districts, and private entities. The TIFIA credit program is designed to fill market gaps and leverage substantial private co-investment by providing supplemental and subordinate capital. The amount of Federal credit assistance may not exceed 33 per cent of total reasonably anticipated eligible project costs.

Transurban utilised TIFIA through its US\$2 billion Capital Beltway HOT Lanes project. The US Government provided Transurban with a 40 year US\$589 million loan, with a fixed interest rate of 4.45 per cent. A loan of this length, coupled with the certainty of a low fixed interest rate for the life of the loan would not normally be available to greenfield infrastructure projects. The TIFIA loan was structured with ten years of capitalised interest during construction and ramp-up, followed by interest only for 15 years and then a final 15 years of interest plus principal. The loan structure gives the project the necessary time to work through the difficult and higher risk construction and ramp-up periods.

Transurban believes a program similar to TIFIA could work well in the Australian context, as it offers a government subsidised loan, not a grant, as a means of assisting large scale infrastructure projects to get through the difficult construction and ramp-up periods of their development. From a government perspective, this loan leverages a significant amount of private capital that may not otherwise be invested. In the US, the demand for TIFIA has so far outstripped the availability of loans, demonstrating the success of the program in enabling the private sector to invest in large infrastructure projects.

## APPENDIX 5: MEASURES FOR ACTION

This appendix details possible ways that several key recommendations in the report could be actioned. The recommendations are considered under each of the three reform themes: funding reform, better planning and efficient markets.



### 1. FUNDING REFORM

These reform options provide governments with methods to support or incentivise investment in infrastructure projects. They are not suitable for all situations or all projects. The effectiveness of each option relies on them being used appropriately, such as in conjunction with other complimenting options.

#### 1.1 USER CHARGING

User charging is already in place for a range of infrastructure (such as water and electricity) through a variety of tariffs including: flat rate pricing; unit/volume pricing; two-part tariffs – fixed rate plus a variable charge; block tariffs; peak-load or seasonal tariffs.

Applying user charges to other fixed infrastructure assets can be investigated – in particular for roads. Road charging options include: tolls, network charging, congestion pricing, distance driven, High Occupancy Toll lanes.

Work on user charges for heavy vehicles is already underway through the COAG Road Reform Plan.

However, the idea of user charging can be unpalatable where consumers perceive they are paying twice – that is, already paying for roads through income taxes, fuel surcharges, car registrations etc, but then expected to pay again through a toll (or are redirected onto toll roads).

Road users are more accepting of a toll if they perceive a utility benefit such as a time saving, a better asset or the delivery of a new asset much sooner than otherwise would be the case without funding through a charge.

User charging may also be more acceptable if applied in conjunction with a range of other reforms such as transparency in pricing, rebates or discounts in taxes/surcharges, and the availability of alternatives or improved services (such as better public transport).

Given that the Australian Government owns very few infrastructure assets, the support of State and Territory governments to implement this option will be needed. There is unlikely to be a uniform approach to user charging across the country given the different attitudes towards user charging from State and Territory governments.

## **1.2 GOVERNMENT ASSISTANCE AND CO-FUNDING**

The majority of the Australian Government's investment in infrastructure is in the form of grants to States and Territories. The Australian Government has shown a predisposition towards looking at alternative funding methods (e.g. proposed equity injections for Oakajee Port and Darwin Port). The Australian Government can continue to expand its repertoire of funding options for projects beyond the use of grants. However, all of these models would need the cooperation of the relevant State or Territory government. These options will not be applicable to all infrastructure projects. They are categorised into options for projects with user charges, and those without user charges.

### **1.2.1 Options for projects with user charges**

The options below are suitable for projects where it is possible to institute a user charge, but where the private sector is reluctant to take on demand risk. This is particularly appropriate for Greenfield toll roads that create a new link in a transport network, making patronage difficult to predict (akin to the WestlinkM7, which created a new orbital route, whereas the M4 duplicated the existing Great Western Highway).

#### **i. Demand risk sharing**

Based on a suitable patronage forecast, governments could guarantee a minimum revenue stream to the private sector proponent.

The concessionaire would be given the right to collect a user charge on the project. During the procurement, governments could agree to a revenue guarantee that suits the project's financial structure – mitigating some of the demand risk of the project.

If revenue from the user charge falls below the guaranteed minimum in a given year, governments could provide a grant to make up the difference. The deal could also be

structured so that the governments receive a share of the revenue if it exceeds a certain amount. This would help to mitigate the increased risk faced during the ramp-up period, but if the road performs better than expected, the government shares in the gains.

It is likely that any support provided by governments would be treated as a contingent liability in the budget.

#### **ii. Demand-risk support - Grant**

Under this option, governments would provide a series of grants to the concessionaire during the ramp up phase of the project to support the project while traffic is uncertain. The funding reduces over time, in line with the expected increase in traffic until full demand risk is transferred to the private sector concessionaire.

The value of each grant would be agreed during procurement.

#### **iii. Demand-risk support - Loan**

Governments could provide a loan facility to the private sector operator during the ramp up phase of the project. Should revenues be insufficient to cover costs, the concessionaire can draw money from the loan facility.

The size of the loan facility, and its interest rate would be determined at the time of procurement, with the minimum interest rate likely to be marginally higher than the 10-year government bond rate.

The loan could come with a grace period for repayments for a set period after first use of the facility. It could also have a maximum period for draw down, ensuring that loan does not exist as a liability indefinitely.

#### **iv. Hybrid availability/demand risk sharing**

For a project with user charges – the project is financed by the private sector, funded through availability payments from governments. The concessionaire collects the toll, and passes it back to government.

To provide some commercial incentive to the private operator, the concessionaire could receive a share of the revenue if it exceeds a predetermined ceiling.

#### **v. Long-term debt**

The Australian Government could provide loans to projects with terms beyond those which the private sector is currently willing to provide (e.g. tenors of 30 years). The loans could be made to the State government or a private sector concessionaire, similar to the Transportation Infrastructure Finance and Innovation Act (TIFIA) program in the United States of America.

They would be on a *pari passu* basis with other lenders, with repayments starting 5 years after substantial completion of the project to allow the project’s financials to settle after the initial ramp up phase.

The parties would negotiate the interest rate, and how often interest is applied. However, the minimum interest rate would likely be marginally higher than the 10-year government bond rate.

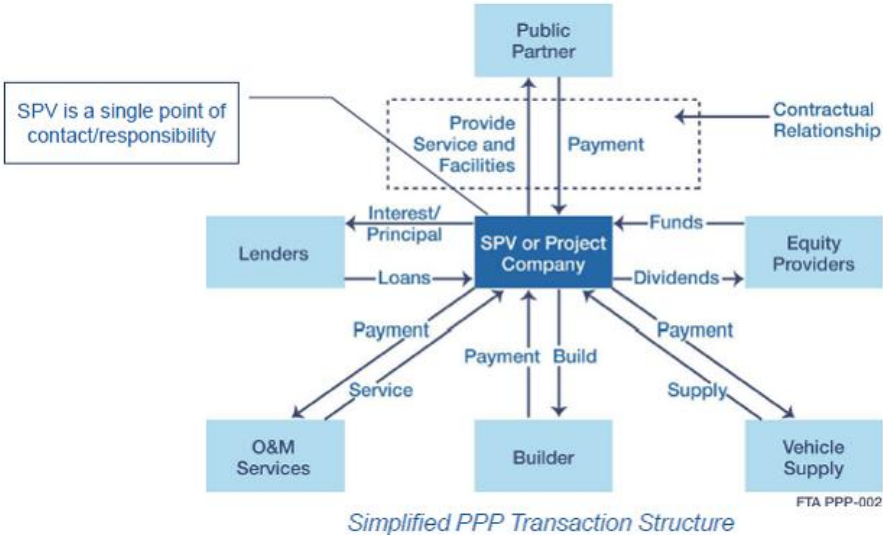
**1.2.2 OPTIONS FOR PROJECTS WITHOUT USER CHARGES**

**i. Availability payments**

Governments could provide their funding contributions through availability payments to the private sector concessionaire.

One option would be to pay the Australian Government’s contribution annually spread out over a number of years post the project’s completion. The State and Territory governments would find the funds for the initial capital investment.

In most cases the Australian Government is not the owner of, or the procuring jurisdiction for roads, most rail and ports. The State Government is the procuring authority, has control for the delivery of the asset, and is the eventual owner of the asset. The diagram below shows a typical concession.



The Public Partner is responsible for the contractual relationship – this is the State Government. The Australian Government would add a project to the National Partnership Agreement (much like other projects within the Nation Building Program), however for an availability payment project, will make its payments across the concession period (e.g. 20 years). The Australian Government would have no contractual arrangements with the Special Purpose Vehicle (SPV) or Project Company.

The use of the availability payments option has a range of benefits:

- Where appropriate, it allows use of the PPP procurement model (which has been shown to deliver greater whole of life efficiencies when compared to other procurement models);
- State and Territory governments retains control over user fees and performance requirements;
- Guaranteed, long-term budget certainty and Australian Government's total payment obligation is capped;
- Payments do not start until facilities are completed and operating - thereby incentivising faster delivery and higher quality assets to minimise maintenance costs;
- Availability deals tend to attract a wider group of investors and contractors; and
- The project risk profile is typically lower when compared with full concession structures.

## **ii. Operational support grants**

Similar to the availability payments option above, the Australian Government could provide a series of upfront grants to the State government owner of an infrastructure project to contribute towards the availability payments of an infrastructure project, or a predetermined set of infrastructure projects.

This option could be negotiated through a National Partnership Agreement, much like the funding for the Nation Building Program and would be treated as an expense in the budget.

### **1.2.3 IMPLEMENTATION ARRANGEMENTS**

In consultation with state and territory governments, the Australian Government could take on a more pro-active role in investigating infrastructure projects from Infrastructure Australia's priority list for their market potential in the early planning stages. Where appropriate, advice would be sought from superannuation firms, constructors, and other investors on the best structure to get the project off the ground.

The function could be vested in:

- An existing Australian Government department;
- A new Australian Government agency;
- A new COAG body; or
- A Government Business Enterprise.

This measure could draw on aspects of the roles of similar bodies overseas such as Infrastructure Ontario and here in Australia such as Partnerships Victoria, which provides advice and assistance to bring projects to market. This will include advising government on the appropriate funding and financing method for a particular project. The body established to undertake this more pro-active role will have scope to consider all methods of procurement, not just PPPs, and draw on measures outlined in this report (see Stream 2 below). The focus will be on projects with high national importance but marginal commerciality.

The primary benefit of this approach is that it allows the government to gain and maintain skills in infrastructure deal making that do not currently exist, or are developed on an ad hoc basis for particular projects (e.g. Moorebank Intermodal, Gold Coast Rapid Transit). It thereby reduces the implementation risk to government.

### **1.3 CAPTURING MORE VALUE**

As part of a government's scoping and development of proposed infrastructure projects, greater focus could be paid to capturing the additional value generated by the asset.

Properties that benefit from investment in infrastructure can make a direct or indirect financial contribution to help to defray the cost of infrastructure. Prior to the implementation of the value capture mechanisms proposed, each of the mechanisms would need to be evaluated against a policy evaluation framework.

The major risk with this approach is there may be a push by residents in the broader vicinity of the project for compensation due to falling property values if the government announces it wishes to capture part of the projected increase in property values.

Some value capture options to consider are:

#### **1.3.1 Joint Property Development**

Some projects offer opportunities to undertake commercial development alongside the public infrastructure provision. For example, underground railway station developments can be combined with redevelopment of the surface buildings. A new underground railway project could be broken up such that provision of the tunnels and track are procured in a separate transaction to the stations. The stations could then be procured using a PPP, where a private developer is able to build a residential/commercial building with a train station within it. For example, to build Chatswood station in Sydney, and Melbourne Central, air rights for major retail and commercial complexes were sold to the developer.

While this option is unlikely ever to provide sufficient revenue to eliminate the need for government contributions, it can reduce those contributions.



### 1.3.2 Tax Increment Financing (TIF)

In TIF, the increase in land tax or rate revenues above a background increase (based on historical trends) within a particular geographic area is hypothecated to the concessionaire of the infrastructure project in the area. TIF carries the significant risk that growth in land tax or rate revenue will provide insufficient revenue to cover the debt costs of the private developer.

A variant on TIF is a flat tax levied on all residents and businesses within the area based on the assumption that the area will experience income growth at the same rate as the tax because of the provision of the infrastructure. This provides additional certainty to the developer, but it may cause dissatisfaction in the area if the predicted income growth fails to appear.

## 2. BETTER PLANNING

Actions under Better Planning provide improvements on how projects are identified, and how to procure those projects once identified.

The measures in this stream attempt to solve the problems of:

- the lack of quality projects available for investment;
- short time frames available to determine investment strategies; and
- the cost of procurement.

### 2.1 LONG-TERM PLANNING

A significant barrier to investment to date is the lack of a deep, long-term pipeline of infrastructure projects. Long-term planning is needed to add to the investment pipeline in a meaningful way and ensure that the right infrastructure is invested in at the right time.

Work is currently on-going in a number of areas including by the Council of Australian Governments (COAG), Infrastructure Australia and by individual States and Territories.

To ensure consistency in planning across jurisdictions, and to enable the development of a national 20-year infrastructure plan, discussions could commence through COAG for the development of nationally consistent State infrastructure plans, which in turn could inform a national infrastructure plan.

These plans would be developed to take into account:

- 20 year economic and demographic forecasts, including estimates of demand for infrastructure and services;
- Existing infrastructure and its current usage; and
- Government's long-term objectives for all infrastructure sectors.

The plans can incorporate an indicative procurement schedule (to be linked with the National Infrastructure Construction Schedule), providing the market with an indication of when governments are likely to make the decision to proceed with the project.

The plans will need to be reviewed regularly. Agreement to the preparation of the plans could be made through COAG in 2012, with finalised State and Territory plans in place by the end of 2013 (with the national infrastructure plan in place by mid- 2014).

## **2.2 PPP PROCESS REFORM**

Confidence in PPPs has diminished in recent times due to some high profile failures. However, PPPs remain a valuable method for delivering infrastructure. A range of improvements to PPP processes can be pursued to ensure better infrastructure delivery and value-for-money outcomes.

- Better quality and greater degree of collaboration and cooperation between Commonwealth and State governments to determine infrastructure priorities and financing options.
- Investigate ways to further streamline tendering of PPPs, approval processes (particularly across jurisdictions) and greater regulatory reforms including ways to reduce tender/bid costs.
- Greater competition in infrastructure delivery particularly within the construction sector.
- Greater transparency in PPPs, standardising PPP documentation, alternative models for structuring PPPs accounting for risk, financing/funding, ownership etc.
- Providing a set of common information documents, e.g. geotechnical surveys and patronage forecasts, government supply of data, improved availability of data more generally.
- Changes to traffic forecasting models, input parameters and assumptions, consideration of new models (eg that include some form of government payment, early risk sharing).

## **3. EFFICIENT MARKETS**

The measures under this reform theme are proposed to improve the infrastructure investment market. However, while the first option is targeted to the infrastructure market specifically, the second has impacts across the whole economy and should be considered in that context.

### **3.1 CORPORATE BONDS**

The availability, cost and tenor of debt is likely to continue to be a challenge for infrastructure financing. An active commercial bond market may assist in diversifying the sources of debt available for infrastructure projects.

There are several measures for action that could be pursued in order to facilitate the development of a more efficient, deep and liquid corporate debt market that would support infrastructure investment including:

- Examine options for making the structure and regulation of long-term investments more attractive to stimulate the demand for long-term debt, particularly from institutional investors such as superannuation funds.
- Reducing the compliance burdens that have acted as a deterrent to issuing bonds. Work following the Australian Government Corporate Bond Roundtable is on-going and should be progressed.