Fixing Australia’s infrastructure

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ABSTRACT

The Engineers Australia Infrastructure Report Card was released in 2010 and rated Victoria’s Infrastructure as ‘barely adequate’ with the hotspots of Rail, Water and Electricity. The report card noted that there is a fundamental link between sound infrastructure investment and a healthy, productive economy that contributes to a liveable and sustainable society. Infrastructure projects such as new ‘Metro lines’ can shape a city and leave a legacy for future generations. We either invest in infrastructure or suffer the consequences – we are now beginning to suffer the consequences of an infrastructure deficit with urban sprawl, congestion and reduced level of service. This paper discusses the two key recommendations from the report card; the formation of ‘Infrastructure Victoria’ to provide long term integrated planning and a quantum increase in the level of infrastructure spending using a number of mechanisms include public debt. Whilst this paper focuses on Victoria, the principles apply more widely to the issues around procurement of infrastructure across Australia.

INFRASTRUCTURE VICTORIA

The report card recommended the formation of Infrastructure Victoria to:

- Provide whole of Government and Business approach to integrated long term planning and procurement of infrastructure, with a 15+ year horizon
- Plan for population growth, Melbourne at 5M and growing to 7M
- Create a pipeline of prioritised projects
- Develop alternative means for funding infrastructure

Currently infrastructure planning and procurement is piecemeal and haphazard and often driven by a short term crisis or political expediency without a forward looking plan of projects. Victoria’s population has grown by over 700,000 in the past 10 years and has fuelled the economy, but there has not been a comparative increase in infrastructure funding, which has created a real infrastructure deficit. Victoria has had an abundance of transport plans during this period, but little in the way of new projects, suggesting that we are ‘planning rich, but delivery poor’.

A pipeline of projects is also essential for skills retention and development; otherwise the skills are redeployed and lost to other sectors, often in other states or overseas. Studies in the UK have identified that a haphazard approach to project procurement can add around 20% to project costs due to inefficiencies and skill shortages.

The first step in providing an integrated long term procurement plan for infrastructure from Engineers Australia’s perspective is to establish ‘Infrastructure Victoria’. ‘Infrastructure NSW’ has recently been established to provide independent advice to the Government on the infrastructure needs of the state over the next 20 years and in particular: ‘It will look across a broad range of sectors and identify specific strategies and projects for priority consideration, complimenting the work of line and specialist agencies focussing their efforts in specific sectors’.
Recent examples of short term decisions in infrastructure procurement include the Victorian Desalination plant, where a lack of long term planning led to the development of a large, expensive, energy intensive plant to secure Melbourne’s long term water supply. Other recent examples include the priority given to the development of the Avalon Rail link over the rail link to the established and fast growing Melbourne Airport where passengers are held hostage to the exorbitant car parking and taxi charges. A more bizarre example of political transport planning is the notion that the ‘Gillard Government would fund rail projects, whilst the Abbot Government would fund road projects’. Such statements trivialise the complexities of transport infrastructure planning to a meaningless simple short term political grab for votes.

**INFRASTRUCTURE FUNDING**

There seems general acceptance in the wider society that we need better infrastructure, but the question of who pays is very vexed – we don’t want higher taxes, we don’t want user pays, we don’t want to sell assets, we don’t want to borrow – as Sir Rod Eddington, Chairman of Infrastructure Australia remarked “there seems a profound disconnect between our aspirations and reality”. There are really only two sources for funding of infrastructure projects: government or private funds.

Government (State and Federal) investment in infrastructure according to the Bureau of Statistics data averaged around 4.5% of GDP from the late 1950s to the late 1970s. However with increasing demands on the budget particularly from the health and welfare sectors, this investment has been declining to the current state of around 3% GDP.

Our current Federal and State Governments’ levels of borrowing are very low and have a triple ‘A’ rating (AAA) – but ironically Governments are reluctant to borrow at the very low interest available from such a rating due to an obsession to minimise debt and protect the AAA rating. This trap of circular logic would make Joseph Heller, author of the classic novel Catch 22, proud. This obsession with minimising debt needs to be better defined since there are really two types of debt: long term and short term. Clearly, short term debt is ‘bad debt’ and should be avoided to ensure that one is not borrowing to meet recurrent expenses. However, long term Government investment can be considered ‘good debt’ since the investment will benefit future generations, with an average benefit/cost ratio in the order of 1.5 through improved productivity and liveability. Such borrowings are analogous to long term borrowings for a family home.

Governments are currently motivated to return a budget surplus and not borrow and hence are trading a fiscal deficit for an infrastructure deficit. Government (Local, State and Federal) debt in Australia is currently around $600B or 40% of GDP ($1500B) which compares favourably with most other developed countries. For example the percentage of Government debt to GDP for various countries includes; USA 100% GDP, Japan 200%, UK 85%. The economic climate is ideal for long term investment in infrastructure with low interest rates and superannuation funds hungry for long term safe investments. Waiting five years for a ‘better’ situation is unrealistic and will not make the challenge any easier.

The Federal government has much greater leverage to borrow compared to State and Local Governments, and further many of the productivity benefits from improved infrastructure flow back to the Federal government in taxes. Consequently, Australia needs a single national infrastructure fund that can be used to help finance the $700B infrastructure deficit that exists in the country. This fund can be supplemented with contributions from the state and the private sector on a project by project basis.

Government funds are ideal and appropriate where the project has significant long term public good and many intangible benefits, whereas private sector funds can be used on projects that are more commercial in nature with a defined income stream, such as toll roads. A recent trend has been for the Government to borrow through the private sector for most major projects using the public private partnership PPP mechanism. This ‘off the books’ borrowings protects the Government’s AAA rating,
however at a considerable cost, since the interest rates associated with private sector borrowings are significantly higher than Government bonds.

The private sector is currently hesitant to fund new ‘greenfield’ projects given the challenges associated with both the construction and operational risk. Recent examples where funding challenges have arisen include ‘Eastlink’ in Victoria and ‘Airport Link’ in Brisbane. In both cases, the traffic forecasts at the time of bid finalisation have been more optimistic than the actual traffic generated post completion, resulting in significant losses and asset downgrade. In addition, most fund managers would prefer not to put aside capital in ‘greenfield’ sites for three or four years while it is commissioned.

Australia currently has around $1300 billion of superannuation funds invested, which is likely to triple over the next 20 years. Such super funds are ideally suited to the long term investment nature of infrastructure, provided that the risk profile is reduced and a long term fair and reasonable return is secured.

One hybrid option is for the Government to develop the ‘greenfield’ development with the aid of the private sector. The Government would raise the funds through long term loans or infrastructure bonds and would construct and operate the asset with appropriate tolls for the first one or two years to establish the business case. Such infrastructure bonds would be an ideal investment for superannuation funds with a return around the official borrowing rate. The Government could either; own and operate the asset, with the return being used to furnish the loan, or, sell the asset to the private sector as a ‘brownfield’ development with the construction risk removed and the operational risk substantially reduced. The decision would depend on the asset and the anticipated returns.

The strength of this ‘asset recycling’ approach is that the Government absorbs the construction and operational risk. The annualised rate of return of the asset would then determine the overall value and sale price of the asset. Any difference in the cost to procure and the selling price can be construed as the public benefit that flows from the delivery of the infrastructure system. In other words, the sale price reflects the commercial and direct benefits, whilst the price difference reflects the intangible benefits flowing from the project to the wider community.

Finally, we need reliable and optimised construction to ensure ongoing political, societal and investor support for such mega infrastructure projects. A proven successful model for optimising the benefits, allocation of risk and project timing has been Alliances, where respective parties tend to work in a collaborative style rather than the adversarial approach experienced with many contract forms. In addition, the Alliance type of contract helps support innovation through an improved risk allocation framework.

**SUMMARY**

Although this paper has focussed on infrastructure procurement and performance in Victoria, the issues raised are equally applicable and relevant across all States of Australia.

Current infrastructure in Victoria is ‘barely adequate’ with a number of key issues:

- Population is growing at around 2% per annum
- Infrastructure is ageing
- Infrastructure procurement is political and short term
- Funding is perceived to be tight with projects delayed and stalling
- Profound disconnect between aspirations and reality
- Government protecting the ‘AAA’ credit rating
- Preference for expensive ‘off the books’ borrowing and procurement

Recommendations to improve the procurement of infrastructure include:
• Establishment of ‘Infrastructure Victoria’
  o Long term integrated planning
  o Plan for population growth
  o Pipeline of prioritised projects
• Increase quantum of funding
  o Blend of government and private funds
  o Development of ‘greenfield sites’ and on-sell as ‘brownfield sites’ to manage construction and operational risk
  o Single national infrastructure fund with Government Infrastructure bonds to attract the $1.3T superfunds

Sir Rod Eddington in releasing his East-West Transport study in 2008 stated that ‘Doing nothing is not an option’. Nearly 5 years later, there has been incremental movement at glacial speed, with leadership and funding the critical issues.

The need for long term integrated infrastructure planning and a ‘whole of Government and Business’ approach has never been clearer with clear endorsement from Engineers Australia, Committee for Melbourne, Property Council of Australia and Consult Australia. In addition, the Business Council of Australia and the Australian Industry Group understands the need for sustained long term planning and investment in infrastructure.

Infrastructure underpins our productivity, liveability and sustainability of the city – we either invest in infrastructure or suffer the consequences – we are now beginning to suffer the consequences of an infrastructure deficit with population growth, urban sprawl, congestion and reduced level of service. A quantum increase in investment in infrastructure by Government (from the current 3% GDP back to the historic levels of 4.5% GDP), combined with asset recycling, will be an important first step in dramatically improving the long term infrastructure procurement for the State and the Nation. We can do much better and a bold response led by Government is needed.