

A stylized, low-poly map of Australia is positioned on the right side of the page. The map is composed of various triangular facets in shades of red and white. A network of thin white lines connects several points across the map, extending from the left edge of the page towards the map's outline.

Where next for infrastructure in Australia?

How infrastructure funding
alternatives can help reboot
prosperity for Australia

September 2020



Introduction

COVID-19 presents an array of challenges that nations have never encountered before. Australia is one of many to experience a sudden and steep economic dip. At PwC, we've calculated the value of lost economic activity to 2030 resulting from COVID-19 to be \$406 billion,¹ and this may be conservative if society does not adapt to living with COVID-19 (at least until a vaccine is developed). The Australian community is already feeling the effect with more than 700,000 Australian job losses due to COVID-19, increasing the nation's unemployment rate to 7.5%.² Meanwhile, many companies, particularly retailers, are entering administration as households cut back on discretionary spending. More significant effects on our economy and unemployment levels are likely to come when government support is gradually wound back.

Our recent report, [Australia Rebooted](#), laid out the case for a pro-growth approach to help Australia navigate its way out of the economic crisis caused by COVID-19. This includes building government-funded infrastructure. This report also described a scenario in which the government undertakes future-proofed infrastructure investment, particularly spending on health infrastructure, which has the dual benefit of stimulating the economy in the short to medium-term, while future-proofing against a viral resurgence in the long run.

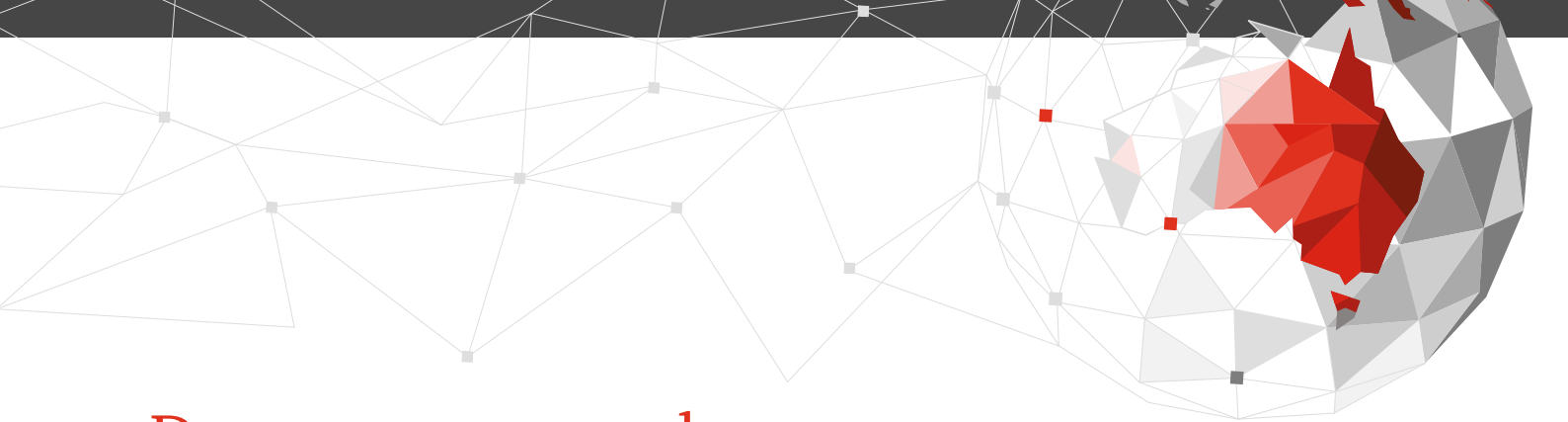
Social distancing is on the cards for the foreseeable future and so the government has a significant incentive to ensure that Australia's National Broadband Network (NBN) is working well given the change in the way many people are working. Real estate agents are reporting that the shift to working from home has increased demand for

housing in regional hubs such as Bendigo and Ballarat in Victoria, as many employees are no longer expected to commute to city centres every day. This shift, together with other new ways of working, may influence what types of transport infrastructure is needed as predicted in our paper: [Where next for transport?](#)

In mid-July, the NSW Government released its [COVID-19 Recovery Plan](#), which supports the pro-growth vision described in our [Australia Rebooted](#) report. This demonstrates the NSW Government's continued emphasis on infrastructure as a driver of recovery, especially as a way to aid employment growth and create jobs. To this end, the NSW Government has a record pipeline of \$100 billion in infrastructure investment planned for the next four years. Add to this Victorian, Queensland and federal government commitments, and the total national pipeline is approaching \$250 billion of infrastructure spend over the next four years.

There is, however, one key question we need to ask: how will we pay for this infrastructure?

There has always been a gap between the amount of infrastructure needed and what governments can afford to fund – and that gap has now significantly widened. Public sources of capital will become increasingly constrained as they compete with other stimuli required to reboot the economy. The funding of infrastructure has often been up for debate but the nation now finds itself on a burning platform; Australia needs to get projects moving faster to help rebuild our economy.

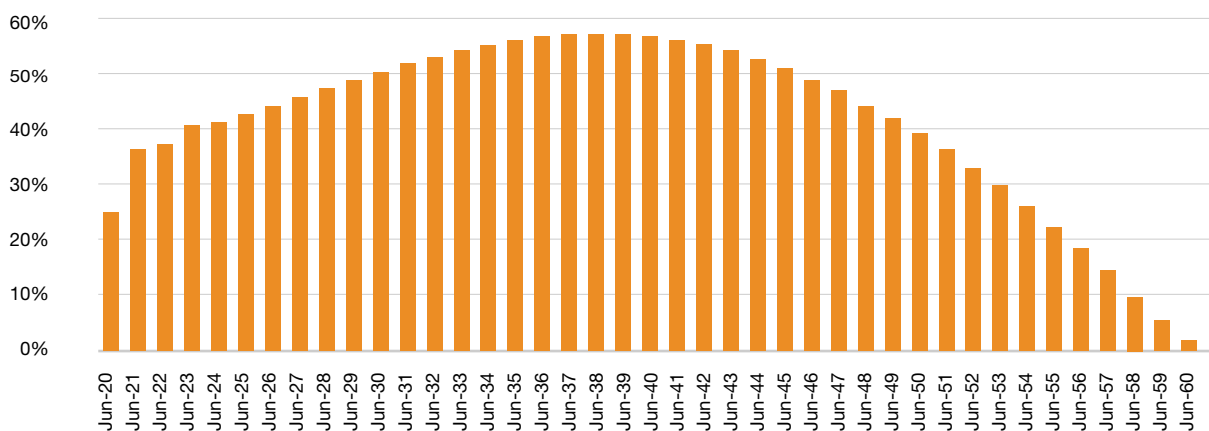


Does government have to pay for everything?

The ability of governments to continue to fund infrastructure spend is under significant pressure. Since the COVID-19 crisis started, Australia's federal and state governments have committed to providing hundreds of billions in support for businesses and individuals. Australia has gone from being a nation nearing a return to budget surplus to expecting deficits over the next 20 years. Since mid-March, when the pandemic prompted a surge in spending, over \$130 billion of new debt has been issued, and July's economic and fiscal update confirmed that national debt would surge from \$540 billion (as at June 2019) to a postwar record of \$852 billion (or 45% of GDP) by the middle of next year. Treasury's fiscal projections (based on assumptions as at 23 July 2020) show net debt will nearly double from \$374 billion in June 2019 to \$677 billion two years later, and from 19% of GDP to 36%. Following the update, our modelling, summarised in the chart below, shows the net debt of the Commonwealth Government will rise to 57% of GDP by 2038.

While governments have the capacity to borrow to fund the building of infrastructure, especially with the current low level of interest rates, the latest credit rating reports from S&P Global note there is a 10% weight attributed to the "debt burden" factor for government ratings. Debt burden risk is currently rated three (moderate) on a scale of one to five (very low to very high), however, S&P's reports clearly state that other strengths are moderated by the high and rising debt burden, resulting in a negative credit watch right now. Additionally, with the stimulus packages announced by the government in response to COVID-19, the debt burden is expected to increase, potentially impacting the rating further. Consequently, governments must ask themselves the question: do they need to own or pay for infrastructure, especially where government may not be best placed to manage the risks, or to operate efficiently.

FIGURE 1
Commonwealth net debt % of GDP



Source: PwC fiscal model

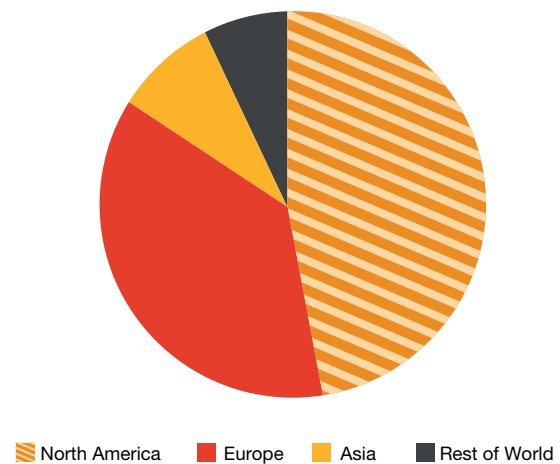


Instead, governments could partner with the private sector to find other ways to fund infrastructure, or to operate it more cost effectively. A larger source of funds would enable the acceleration of projects, creating jobs and assisting with Australia’s economic recovery.

Private capital is in almost the opposite position of government – that is, awash with capital looking for places to invest. As at 30 June 2019, the amount of “dry powder” available globally for infrastructure was estimated by Prequin to be \$308.7 billion.³

Of the global dry powder, approximately 10% sits in Asia (including Australia) of which a large proportion of funds are sitting in Australian superfunds. As at 31 March 2020, A\$2.7 trillion in funds were under Australian superannuation management,⁴ and this is forecast to grow to \$4.8 trillion by 2034.⁵ Typically, 10-15% of these funds under management are invested in infrastructure. Imagine if we could find a way to successfully deploy some of this capital and invest it in a future that would benefit all Australians.

FIGURE 2
Infrastructure dry powder by region \$bn



Source: Prequin

Are we prepared to pay for what we use?

There are revenue streams that could be used to fund infrastructure, including increasing general taxes,⁶ or user-pays funding models. But with strong community resistance to paying more tax and/or user-pays systems, funding constraints are heightened. While there is significant private sector capital available for investment, this is typically directed to economic infrastructure where tolls and user charges provide a return that's commensurate with the risks of investment.

Not all projects meet these investment criteria.

Therefore, to attract private capital, the government needs to structure projects so there is a defined set of cashflows to support private sector investment. Consideration needs to be given to further adoption of charging models through user-pays and value capture mechanisms.

A user-pays model requires anyone using a service to pay a reasonable contribution towards its cost, for example road-user charging. Currently, motorists pay for the use of roads through the fuel excise tax and other charges, however, this does not directly link the payments to the costs of use of the road network, and the network remains largely funded by government. Nor does it adequately cater for electric vehicles or the costs of congestion. In short, the current system of recovering costs is neither efficient nor equitable.

We need to generate greater understanding across our communities of the user-pays principle. This is critical for allowing governments more opportunities to partner with the private sector on infrastructure investments. For more effective user-pays charging we need to invest in technologies that can measure usage and then equip infrastructure to adapt to consumer behavior.

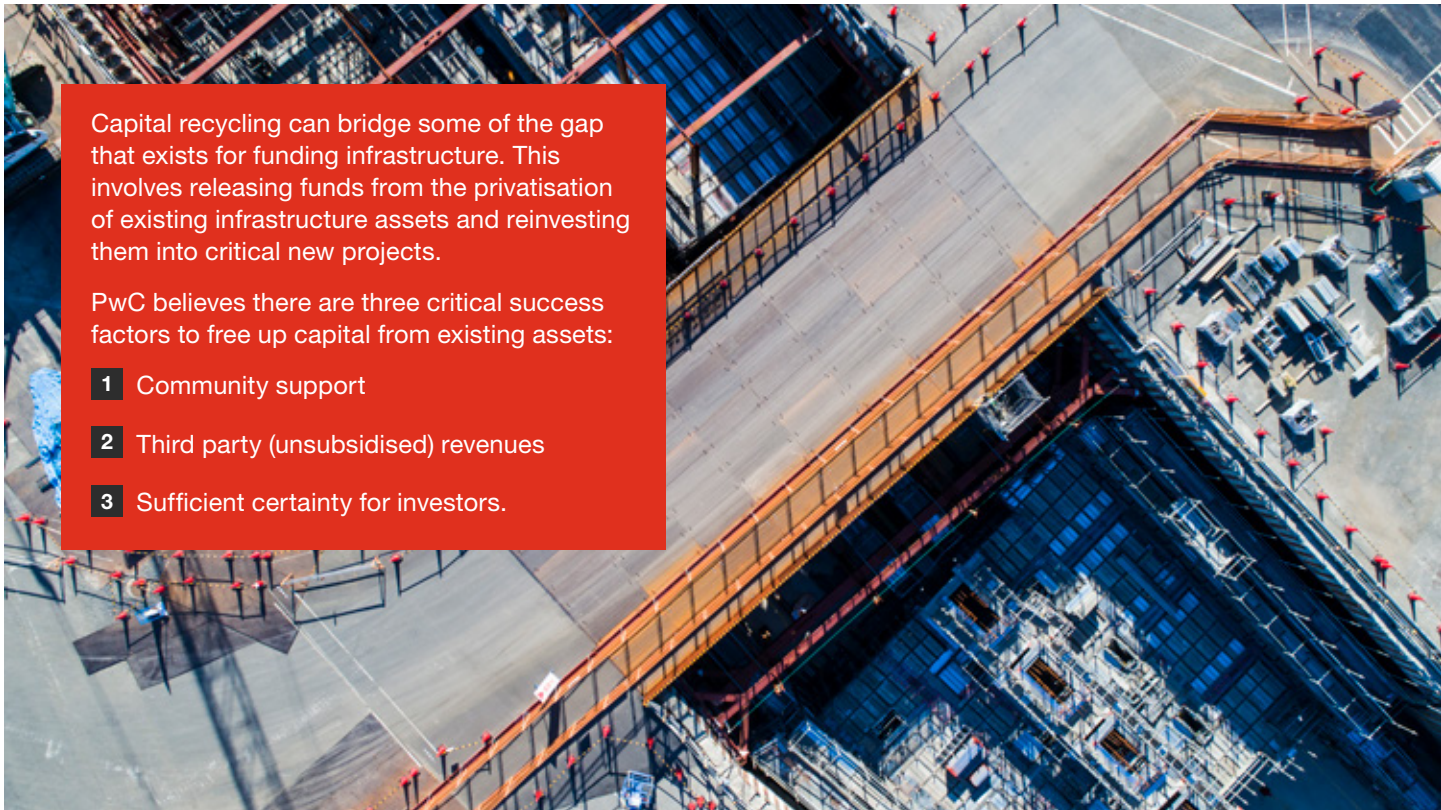
There are already examples of variable tolling technologies in place around the world. These technologies link toll charges to road use and, in some cases, to the level of congestion. The real challenge is building trust within the community to allow governments to move away from legacy charging arrangements and to implement fairer and more efficient cost recovery systems when it comes to infrastructure. That way, users make a reasonable contribution to costs and, where appropriate, taxpayers and other beneficiaries also make a contribution.

Government investment in infrastructure often unlocks value for others beyond the users of that infrastructure. For example, landowners may see uplift in the value of land adjacent to a new railway station. Value capture mechanisms attempt to more directly link the contribution from beneficiaries to the value added from the government's investment in infrastructure. Real progress needs to be made on finding equitable measures that are supported by the community and that meaningfully contribute to the costs of infrastructure provision.

Not all projects can be structured to generate economic returns. Social infrastructure such as schools and hospitals typically relies on payments from the public sector, and is dependent on the financial capacity of the government to fund payments. These projects must continue to be funded by the government.



Recycling more of Australia's capital



Capital recycling can bridge some of the gap that exists for funding infrastructure. This involves releasing funds from the privatisation of existing infrastructure assets and reinvesting them into critical new projects.

PwC believes there are three critical success factors to free up capital from existing assets:

- 1 Community support
- 2 Third party (unsubsidised) revenues
- 3 Sufficient certainty for investors.

Capital recycling has proven to be a very effective alternate funding model. This was clearly demonstrated by the NSW Government in the period 2012-2018 when the government embarked on an asset leasing program for a number of state owned assets. The program was hugely successful and created significant benefits for the people of NSW. In particular, during this time the NSW Government:

- received \$33 billion of proceeds from asset recycling
- redirected these proceeds back into building greenfield (new projects) infrastructure (this was a very important aspect of gaining community support for the program)
- built and created a pipeline of over \$100 billion in infrastructure projects,⁷ such as the North West Rail, WestConnex and NorthConnex
- created new jobs
- reduced travel times for a number of residents in the Northwest who now have access to the North West Rail
- built 45 new schools,⁸ and
- built or redeveloped 58 new hospitals.⁹

Similarly, over this same period, Victoria concluded the \$9.7 billion port lease transaction and the \$1.9 billion commercialisation of Land Use Victoria's registry functions, which supported similar levels of investment in both economic and social infrastructure in Victoria.

What should be considered for capital recycling? Four key questions

The upcoming Federal Budget on 6 October, 2020, will be a critical decision point for the government. It is important that national, state and territory governments are clear about where they will invest, what they will continue to own and the role they will play in markets. Without this clarity, Australia may be faced with a private sector that is hesitant to invest at the scale required for fear that government policy could be inadequate, or could change from election to election.

In communicating its messages, we believe there are four key questions that should influence government decision making, and that are important for the public to understand so they can make informed decisions.

Firstly, does the infrastructure in question need to be owned by the government? This question is the quickest and easiest to answer.

Historically, governments have owned many types of assets before gradually coming to the conclusion they are not the natural owners of all infrastructure assets. No one would now dispute whether brickworks should be under government ownership. Similarly, across the country a number of infrastructure assets have been privatised including airports, ports, toll roads and electricity networks. The upswing in privatisation has national security implications and, in some instances, it may be prudent to limit foreign ownership. Nevertheless, there is no compelling reason why other networks and assets must be owned by government.

While not central to the debate, we also note the rapid change in technology, the impact on provision of services and the need to upgrade systems and processes. The impact on the infrastructure assets of the future will undoubtedly bring new opportunities and challenges, and capital expenditure implications. Many question whether governments would want to own what is expected to be riskier businesses when compared to today which will require more funding for capital expenditure.

Therefore, the second question is: who is best placed to run the infrastructure most efficiently?

This question focuses on productivity and, in particular, whether the government or private sector will provide consumers with the best value for money, including the best possible service. While this paper does not cover this question in detail, many studies over the years from Infrastructure Australia, Chambers' of Commerce and Industry across our states, the Productivity Commission and others have shown potential benefits under private ownership.

So to the next question: having decided private sector participation is a possibility, what checks and balances are required to prevent any non-government owner from abusing its market power?

This is perhaps the most pertinent question and often the focus of community objection. Infrastructure assets are, by their very nature, large assets with high barriers to entry. Consequently, there are often only one or two such assets in a given state, providing the owner with monopolist powers. Objections to private sector participation seem to stem largely from a fear the private sector will use this market power to its advantage, seeking to increase revenue through price increases and also to reduce costs, leading to potential loss of reliable supply or safety concerns. There must be measures in place to ensure the private sector cannot abuse its market power.

State governments are accustomed to such requirements and, in almost all arrangements where the government partners with the private sector, the government has maintained an element of oversight through reporting and monitoring. In certain sectors this is even more pervasive. For example, in the electricity sector, an independent body sets price and regulates tariffs, ensuring a fair return for an efficiently run network. The network itself does not set the price. Similarly, independent bodies set reliability standards and safety standards in many industries. In each case, the regulator and independent agencies set the tariffs and standards as applicable to the network. They make no distinction between a government or private sector shareholder.

Finally, question four is: how will private sector proceeds be used to benefit the community?

Proceeds received from the private sector must be used effectively and the community must be able to see the benefit. NSW has employed capital recycling through the establishment of Restart NSW, which seeks to redeploy funds raised from the lease of port and electricity networks into new projects for the benefit of the community. Similarly, the Victorian Government used funds from the lease of the Port of Melbourne to establish the Victorian Transport Fund. What's important is that the use of the funds is clearly communicated to the public and a cost/benefit analysis is undertaken of the selected projects.



How can governments support capital recycling?

PwC recommends each federal and state government undertake an inventory check to address the four questions above. That way, governments can assess what assets they own and operate, whether they are the logical owners, and whether they can operate these assets most cost effectively for consumers.

Where state ownership is not the most logical answer, an inventory check would also allow governments to consider whether the stability and growth of revenue streams and profitability would appeal to (or could be restructured to appeal to) private sector investors. Also: how might any proceeds from the private sector be used?

To date, global government divestments have largely focused on infrastructure assets. More recently, however, the ownership and operations of IT systems (for example, land titling registries) and data centre transactions have occurred. It is likely there are further assets that would meet private investment mandate criteria that may not have previously been considered for sale, and this could be further enhanced via capital recycling.

In the 2014-15 Federal Budget, the Commonwealth Government announced they would provide up to \$5 billion of incentives to the states in the form of an additional 15% in proceeds as long as the overall proceeds were reinvested in building new infrastructure. Through the investment of \$2.3 billion, the Federal Government helped to create a pipeline of infrastructure projects of more than \$15 billion across the country.¹⁰ PwC strongly encourages the Federal Government to consider bringing back this 15% incentive to help drive reform across all states.

How should the proceeds of capital recycling be invested?

The proceeds of capital recycling need to be invested strategically in order to deliver the infrastructure required to rebuild the national economy and provide Australians with better places to live, work and play. The funding of greenfield infrastructure will require more innovative forms of partnership, which leverage private finance and see governments take on the greenfield risk, at least initially.

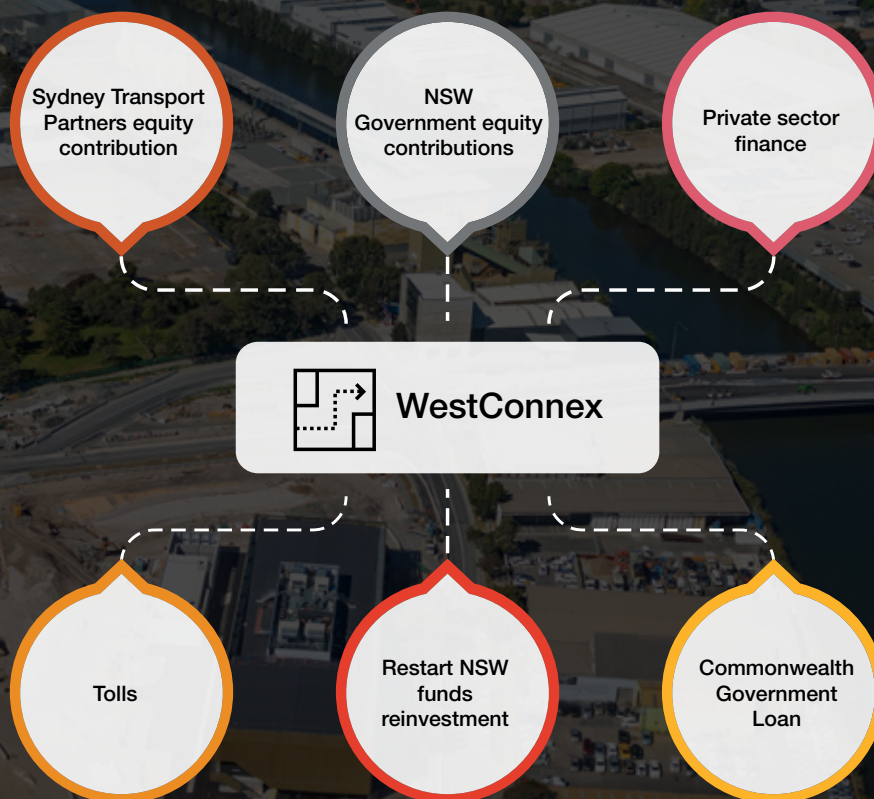
The building of new greenfield infrastructure for a future capital recycling of the project once operating has been used very successfully on a number of projects. A great example of this is WestConnex.

The WestConnex toll road in NSW is a \$25 billion toll road, which is being built in three stages.¹¹ As shown in the diagram below, there are a number of funding sources for this project.

In the early stages, the NSW Government procured the initial construction, taking on the greenfield risks with sources of funding including private sector finance and a loan from the Commonwealth Government. This was followed by the introduction of a private sector consortium that acquired 51%. Part of the proceeds of the sale was then reinvested back into the project to fund the remaining construction works.

Another approach to funding greenfield projects is to leverage existing revenue streams from connected brownfield assets where the patronage risk has already been reduced. This model of funding has been discussed as a possibility for the Western Harbour Tunnel in NSW. In particular, how the existing revenue stream from the Harbour Bridge road toll could be leveraged to provide funding for this project.

FIGURE 3
WestConnex funding sources



Other funding avenues

Over the last five years, State and Territory governments have progressively introduced market-led proposals as an avenue to allow for more partnerships between the private sector and governments. Under this program, the private sector proposes which projects they can build. When initially introduced, there was much excitement about the opportunities this program could unlock and, while governments have received a large number of market-led proposals since the program was introduced, only a handful have made it through. PwC would not expect all projects to be taken forward, however, we would encourage governments to consider various aspects of this program in order to unlock more opportunities.

Potential areas for improvement include the nature and extent of engagement between government and the private sector, as well as the potential for greater pragmatism in assessing the requirement for “uniqueness”. By their nature, many proposals fall outside of business-as-usual activities and, therefore, often fail to gain sufficient support from the relevant department or agencies. Specialist units could be established within departments with responsibility for nurturing ideas from an early stage. These teams could be set KPIs based on identifying and progressing valuable market solutions.

On the subject of uniqueness, many good ideas are either not put forward or are rejected as a result of this criterion. While it’s important for preserving the public interest, current processes often fail to recognise the inherent value of new ideas, and bias can result in assessment processes determining that government can deliver the same outcomes.

More joint ventures between the government and the private sector are encouraged. This model would be particularly relevant for the development of real estate. This would allow the government to get the private sector to fund infrastructure that supports their commercial developments but which on the merits of the real estate itself would not have received public funding. The sale of land at Wentworth Point by Roads and Maritime Services to international property developer, Sekisui House is a great example of this.¹²

Joint ventures could also involve the outsourcing of government services referred to as “contestability” which would help free up funds from the governments operating budget. Contestability of government services considers the service being provided and questions whether the government is best placed to provide that service or whether the private sector could do so. The overall aim is to get the best outcome for the community. These outsourcing arrangements are often procured via competitive bid processes. This gives operators the chance to provide services, which can then be compared against the cost (and quality) of those services provided by the government before the contract is granted. Examples of services that can be made contestable are bus services, as well as a number of services in the health sector (for example, the provision of laundry services to health facilities).

Another way to enable more private sector investment is for the private sector to help fund capital expenditure investment for government-owned assets rather than the government having to fund it all. This could be an option for Australia’s water sector, where the majority of assets are still owned by the government. A number of the nation’s water networks are ageing and they require significant investment to be upgraded. Similarly, the Queensland Government considered funding future capital expenditure for the state’s electricity network business through issuing a hybrid instrument. Such a model would not have divested the government’s ownership interest, however, it would have provided private sector investors with equity-like returns that were matched to the overall business.



Where to from here?

As stakeholders, it is incumbent on all Australians to ensure the facts around infrastructure investment and ownership are clearly explained to the community so they can make informed decisions.

Not all debt is bad debt and, given the current low cost of debt funding, there is merit in governments borrowing to invest in productivity-enhancing projects, which can grow the economy whilst repaying the associated interest. Most recently, \$15 billion was raised via a 30-year bond at a rate of only 1.94% in July 2020, followed by a \$21 billion issue of a 10.5-year bond in August 2020. Nevertheless, the fiscal stimulus to reboot the economy has created unprecedented levels of debt at a time when we require infrastructure investment. Infrastructure Australia currently has \$64 billion of projects on its priority list.¹³

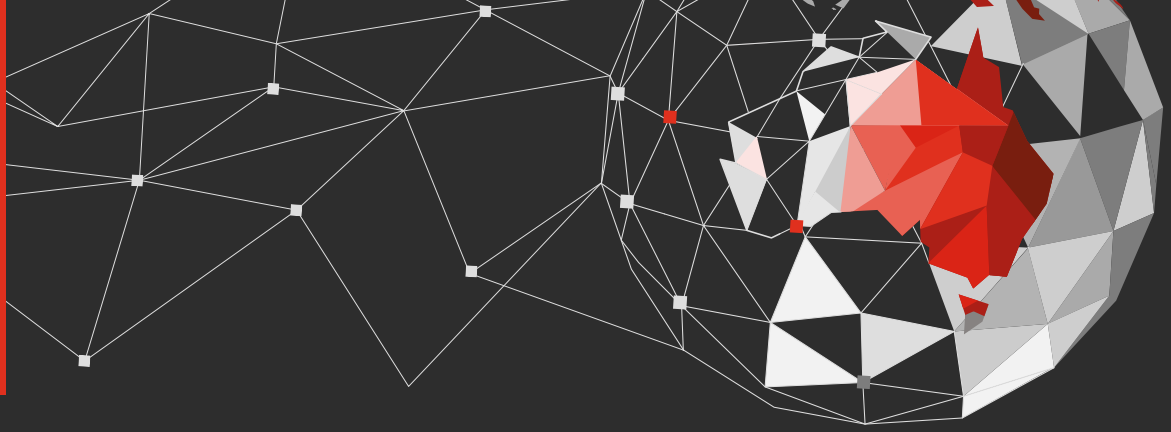
While superfunds need to consider the overall investment portfolio allocation, as well as the associated risk and return for their members, they should be encouraged to consider a greater short-term allocation to assist in this required infrastructure. The risk/return equation typically means funds avoid new greenfield assets with development or construction risk, but are much more prepared to invest in operating assets with stable cashflows. Indeed, the funds are hungry to find assets and often cite the lack of available and suitable opportunities as a reason for not deploying capital into the Australian market.

Across the Tasman, the New Zealand Government announced NZ\$2.6 billion (A\$2.42 billion) from its NZ\$3 billion (A\$2.7 billion) “shovel-ready” infrastructure fund, allocating the money across 150 projects. The Australian government could establish a similar infrastructure fund (noting the existing FutureFund was set up as an independent authority) to enable riskier earlier stage projects to get underway, with a view to private sector participation after certain hurdles have been cleared.

PwC encourages governments to take a longer-term, strategic view when it comes to infrastructure spending, based on the best outcomes for the community. This should involve greater private sector participation in the many forms that this can take. We recommend governments undertake an inventory check of assets under ownership, potentially supported by reintroducing support for capital recycling and other forms of private sector participation in the upcoming budget.

Endnotes

- 1 Prior to the second Victorian shutdown.
- 2 Australian Bureau of Statistics, Labour Force, July 2020.
- 3 Based on US\$217bn converted at 1.42276 on 30 June 2019 per oanda.com
- 4 APRA Quarterly Superannuation Performance Statistics, March 2020.
- 5 Rice Warner – <https://www.ricewarner.com/impact-of-long-term-trends-on-superannuation/>
- 6 Please refer to our separate report on tax reform: Where Next for Australia's Tax System? How GST Reform Can Help Reboot Prosperity for Australia, July 2020. <https://www.pwc.com.au/tax/assets/tax-reform/2020/where-next-for-australias-tax-system-june2020.pdf>
- 7 NSW Government, Budget Paper No. 2 - Infrastructure Statement p 1-3. https://www.budget.nsw.gov.au/sites/default/files/budget-2018-06/Budget_Paper_2-Infrastructure%20Statement-Budget_201819.pdf
- 8 NSW Government, Budget Papers – Infrastructure Statement (2011-12 – 2018-19).
- 9 NSW Government, Budget Papers – Infrastructure Statement (2011-12 – 2018-19).
- 10 Australian Government, Review of the National Partnership Agreement on Asset Recycling. http://www.federalfinancialrelations.gov.au/content/downloads/reviews/asset/Review_NPA_asset_recycling-2019.pdf
- 11 Based on Enterprise Value on 31 August 2018 when Sydney Transport Partners acquired 51% equity interest from the NSW Government. <https://www.transurban.com/content/dam/investor-centre/06/WestConnex-acquisition-presentation.pdf>
- 12 NSW Government, Sale Drives Delivery of Priority Precinct at Wentworth Point, 20 October 2016. <https://www.landcom.com.au/news/media/sale-drives-delivery-of-priority-precinct-at-wentworth-point/>
- 13 Infrastructure Australia, 2020 Infrastructure Priority List, 5 August 2020.



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