



Infrastructure development presents a significant tool for governments to drive economic growth. Transport infrastructure investment delivers stimulus, long-term improvement to living standards and international competitiveness.

Efficient transport networks are proven contributors to the economic vibrancy of the cities they serve, and those cities that most effectively address this issue will find themselves at a significant advantage as commercial centres and attractive places to live. As governments pursue this objective, it is clear that those that find ways to access capital beyond their own balance sheets will be able to address this problem most effectively.

The current funding requirement for critical infrastructure projects across Australia is massive. In 2013 Infrastructure Australia estimated that more than \$80 billion in funding for priority projects was required, including \$11 billion for projects that were ready to proceed. The majority of these projects relate to transport infrastructure.

In a world where scarcity of government capital prevails, the overarching objective for stretched public purses should be to deliver the most effective infrastructure with finite resources. For governments to achieve this they will need to identify sources of capital beyond their own balance sheets and determine where and how they can attract private capital to increase the funding pool available in real terms.

SOURCES OF PRIVATE CAPITAL

The private sector has a long history of working with governments to successfully develop infrastructure and bring additional capital to the funding mix of projects. There are numerous examples in recent decades, particularly in road infrastructure projects.

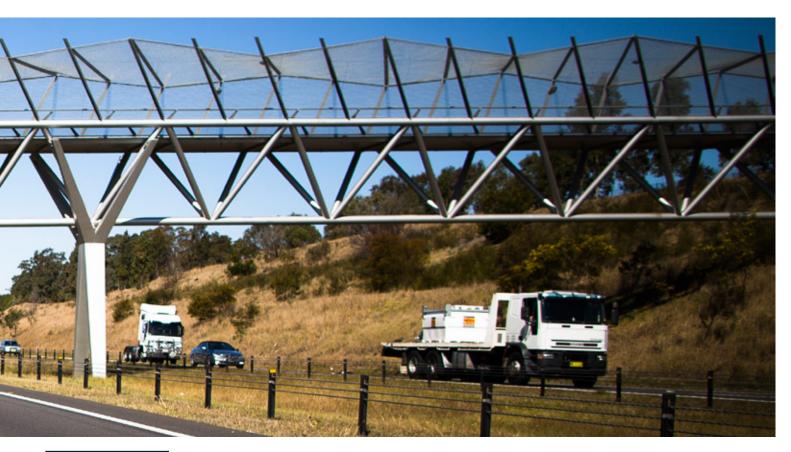
When it comes to the key sources of private capital, there are two major pools with different risk-return profiles.

The most significant source of private capital comes from the global superannuation funds that are looking for long-term, stable returns to match their members' liabilities. The risk appetite of this class of investor is well matched to established assets, which means they are unlikely to develop new projects. This is a core reason the industry has recommended government develop and fund new assets and then look to sell once an operating history has been developed. This may make sense for governments in regions where forecasting is difficult—such as developing areas.

The other source of private capital comes from infrastructure developers, who, as specialist owner/operators such as Transurban, and the more wellresourced super/sovereign funds, can analyse and understand the significant development risks associated with projects. This class of investor is more likely to develop projects, and in doing so, to manage additional risks associated with construction and estimation of patronage and revenue from as-yet undeveloped projects. Importantly, this has the potential to extend the development capability beyond government finances.

Fundamental to both classes of investors are user charges. While sometimes controversial, user charges are a vital and transparent mechanism to fund infrastructure. This transparency is important, with a need to better educate the travelling public on the true cost of providing infrastructure.

A number of different models that can be used to access private capital are considered in more detail in this paper.



ASSET SALES— CAPITAL RECYCLING

The privatisation of infrastructure is not a new concept and has been employed effectively in Australia by various states. Indeed the Kennett Government's sale of the electricity assets in Victoria in the early 1990s was integral to the resurrection of the state's fiscal position through the course of that decade. In that example the sale of privatised electricity assets realised more than \$20 billion, which was largely used to pay down government debt.

These asset sales had a profound effect on the state through improved customer experience, more reliable electricity services and a material improvement to the state's financial position.

A more recent example of a selfsustaining infrastructure funding model can be found in NSW, where the government has signalled its intent to recycle capital raised through the sale of Port Botany as seed funding for the first phase of the WestConnex road project.

The recycling of capital from mature assets to fund new infrastructure presents an opportunity for governments to continuously invest to address the infrastructure backlog. It is imperative that reinvestment is done in a targeted way with clear objectives in mind. To prosecute the most active development agenda, the capital recycled should be channelled to those projects that cannot attract development capital from the

private sector on a standalone basis. In pursuing this approach governments could develop assets that would not otherwise be built. This would leave the option open for those projects with project economics that are capable of generating a return on investment to be developed by the private sector in parallel—without any burden to the government financial position. In effect, this would allow private capital to work alongside public capital on different projects to maximum effect.

ASSET SALES—ONE SOLUTION IN A BROADER FUNDING PUZZLE

While asset recycling is an important part of the puzzle, we must be aware that lead times on development to sale can be long.

The WestConnex project provides a ready example of how this approach could work. This project is estimated to have a capital cost of \$11.5 billion spread across multiple stages. To get a sense of the time that it would take to recycle capital from one stage to the next, one need only

look at the potential timeline of the first stage. Designing and building the first phase could take up to five years. It could take another three to five years for the stable traffic levels to establish in order to sell the revenue stream and recycle this capital. This means it could take the best part of a decade before the funding becomes available to recycle.

If later stages of the WestConnex project are capable of supporting a standalone business case based on tolls generated, then the NSW Government will have the option to have the private sector concurrently develop these and, in doing so, substantially accelerate the timeline for delivery. Clearly, private sector participation through a user pays model is predicated upon value for money being achievable for government, and if this can be established there are clear benefits that could be achieved from private sector participation.

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USER PAYS MODEL

There is a misconception around infrastructure funding that the risk appetite of the private sector has diminished. This is not true. Despite some of the troubled PPPs in Queensland and elsewhere in recent years, there are also a number of examples of successful collaboration between the public and private sectors. These demonstrate the kind of outcomes that can be achieved when a more sensible approach to procurement and engagement is adopted.

There remains appetite in the private sector—among those with a longer investment horizon—to take patronage risk on projects. The skills and experience of the private sector organisations are critical to the effective management of this risk. Transurban, as a long-term owner and operator of road infrastructure, provides an example of a group in the road infrastructure sector capable of working with government to appropriately estimate and price patronage risk.

It is worth noting that governments and the taxpayer—were not financially harmed by PPP failures in Queensland. This model appropriately puts the onus of success on the investor—proving the government has been able to transfer the risk to the private sector.

The user pays model clearly articulates to the user the true cost of this provision. This can be lost under other funding models.

The reality is large infrastructure projects are becoming more difficult to fund, with the cost/funding mix often unclear to the ultimate user. In this way, the user pays model can be viewed as good government policy—highlighting infrastructure is not free.

PROCUREMENT METHODOLOGY CRUCIAL TO EFFECTIVE PRIVATE SECTOR ENGAGEMENT

In NSW and Victoria, Transurban has committed or invested more than \$1 billion in the past five years to improve capacity on the road networks it manages. This includes widening the M2 and M5 motorways in Sydney and CityLink in Melbourne. These investments and network enhancements have been negotiated and agreed with state governments. These agreements have found ways to leverage Transurban's existing networks to make the projects feasible, as a substitute for direct capital contributions by governments. This has been done through adjustments to tolling levels and extensions to agreements that provide the right to toll. In doing this, significant upgrades have been delivered to substantially improve the traffic flows and travel times—leading directly to economic benefits in these cities.

This model of collaborative dialogue is now being used for further greenfields development on the Sydney network with the F3-M2 project. Working with infrastructure specialists who are willing to bring ideas to government through unsolicited proposals is one model that has worked well in NSW. It has encouraged innovation, particularly in respect of funding options, and has delivered significant investment into the road network of NSW. Most importantly, this model has delivered new money into the road funding mix beyond the government's financial position.

While the F3-M2 proposal is the subject of ongoing review by the NSW Government, it demonstrates the kind of opportunities that are available through constructive dialogue with specialist, private-sector infrastructure providers who have a long-term approach to the development and management of infrastructure. In this instance Transurban has put forward a proposal that seeks to leverage its existing network footprint to unlock value and reduce the government funding commitment required for this project.

In short, this PPP procurement model allows the flexibility to continually enhance the network throughout the concession period and, importantly, the motivation for the private sector to do so. This creates an environment conducive to innovation.

TRANSPARENT 'HYPOTHECATION'

One of the challenges associated with raising funding for major projects is the lack of transparency and apparent fairness for those paying.

One approach to overcome that objection is to ensure that there is a clear and well communicated set of benefits identified that accrue for those paying. In a traditional tolling model, a major piece of infrastructure has been developed and/or enhanced and hence there is clear evidence for the toll and recognition of where the funds collected are to be directed.

Understandably objections arise where tolling is proposed on existing free infrastructure where there is no material improvement or benefits for those paying the toll. This occurs particularly when revenues generated disappear into general funds to be redistributed in areas unrelated to the project or users in question.

But these traditional models are not the only way. By broadening our perspective, further options are available.

Hypothecation offers another means to raise funds. In the road infrastructure example this approach essentially collects tolls and dedicates them specifically to related projects that are directly aligned with the users and community who will benefit from them. This guarantees the community gains the benefits—meaning it is essentially a localised form of revenue raising that benefits those same locals.

Such forms of hypothecation can also be innovative in the way they are applied, such as tolling roads to fund the road itself, or congestion relief through parallel builds, or even boosting public transport in the corridor to provide more options for users.

There are real examples of this approach at work. Toll roads in many parts of the world have been sold, with proceeds devoted to "near-neighbour" developments or public transport development in the corridor. Many Australian cities may benefit from a similar approach.



SUCCESSFUL PROJECTS DELIVERED THROUGH PPP MODEL USING PRIVATE SECTOR FUNDING

CITYLINK, MELBOURNE

- → 22 kilometre/14 mile motorway in Melbourne, Australia
- → Opened to traffic in August 1999
- → Connects three major urban freeways—the West Gate, Tullamarine and Monash
- \rightarrow Links Melbourne's manufacturing hubs and the city centre, port and airport
- → One of the world's first fully electronic toll roads
- → More than 2.1 million vehicles registered to use the road
- → Carries more than 100 million vehicle trips per year, and
- → 100 per cent owned and managed by Transurban.

WESTLINK M7, SYDNEY

- → 40 kilometre/25 mile motorway in Sydney, Australia
- → Opened to traffic in December 2005
- → Sydney's first distance-based toll road
- → Situated in a strong industrial and residential growth corridor
- → 100 per cent electronically tolled
- → Improves access to western Sydney, and helps motorists avoid up to 48 sets of traffic lights, and
- ightarrow 50 per cent Transurban owned.

MELBOURNE CONVENTION CENTRE

- → Opened in July 2009
- Centrepiece of a \$1.4 billion precinct along the Yarra River, increasing capacity for Melbourne to host major, internationally competitive events
- Considered among the most versatile and advanced convention and exhibition centres in the world
- → Accredited with the first six-star 'Green Star' environmental rating in Australia for a convention centre
- → Delivered as a PPP project with the Victorian Government, and
- → The Victorian Government contributed \$370 million toward construction of the centre.

ADVANTAGES OF PUBLIC AND PRIVATE SECTORS WORKING TOGETHER

- → Delivers significant private sector investment
- → Transfers significant risk to the private sector
- > Delivers tangible outcomes for the community, and
- → Allows government to fund other priorities.



AVAILABILITY PAYMENT MODEL

The availability model is largely a lease arrangement that requires the private operator to keep a facility open to a defined level of service. To date there has been no connection to usage or throughput. This means that the operator has been indifferent to the levels of patronage.

Availability funding relies on the government balance sheet to finance projects. The fundamental premise of this approach is that the government assumes key elements of risk relating to the project, such as patronage risk, and engages a private sector operator to operate and maintain the asset for an agreed periodic payment.

The availability payment model is most suited to projects where the user pays component is insufficient to make a material contribution to the cost of funding, the operating cost over time far exceeds the capital cost, or there are significant social equity issues involved. Options such as government funding and availability payments offer a means through which to deliver socially important infrastructure.

These structures do not transfer patronage risk to the private sector, with this risk residing with government, at least for a period.

Availability structures—which do not have user pays—do not introduce new funds to the equation. Government's payment profile is staggered over the life of the contract and remains on the government balance sheet. This effectively means it will continue to draw on the government financial position.

PENINSULA LINK

- → Opened on 18 January 2013
- → PPP managed by the Linking Melbourne Authority (formerly SEITA) and delivered by private sector partner Southern Way
- → The contract with Southern Way to design, construct and finance the freeway was signed in January 2010, with a total project delivery cost for the two parties being \$759 million
- → The Victorian Government provides quarterly payments for delivery under an availability model, with no charges to motorists, and
- → Southern Way operates and maintains the freeway for the next 25 years.

KEY OUTCOMES

- → Limited risk transfer to private sector (i.e. government retains patronage risk)
- → Fully government funded—payments over 25 years, and
- → Continues to impact state credit rating.

However, it does not have to be all or nothing. Like any worthwhile approach, availability payments can serve a valuable purpose alongside other forms of private sector risk allocation funding. For instance, there are numerous examples around the world of governments supporting the feasibility of PPPs by contributing funds across the life of the concession through an availability payment (as opposed to upfront). In this way, the government benefits from

private sector funding and risk transfer, with the added benefit of avoiding large up-front payments.



GOVERNMENT-SUBSIDISED INFRASTRUCTURE LOANS

In the face of the backlog of infrastructure projects, there is widespread agreement on the need for better funding mechanisms to ensure the viability of large scale infrastructure projects—and that includes more innovative approaches to financing. Governments can play a key role in this area.

One compelling example—which has driven the development of major projects in the US state of Virginia—is a credit funding program known as TIFIA (Transportation Infrastructure Finance and Innovation Act). Under this program, the government provided access to capital to assist the development of some of the most compelling infrastructure projects.

TIFIA credit assistance looks to bridge the gap between private capital and project feasibility with a government loan—not grant—that acts as 'patient' capital to get large-scale infrastructure through the difficult start up years.

Key features of this program include:

- → A low (concessional) interest rate which would not otherwise be available for greenfield infrastructure projects fixed for the life of the loan
- → No cash interest payable during cashconstrained construction and rampup periods, with interest capitalised through this period
- → An interest-only period, followed by interest plus principal repayments towards the end of the loan, and
- → Government is repaid—this is not a grant.

Under the TIFIA program, each dollar of federal funding has leveraged a significant amount of private capital.

Transurban used this type of funding on the US \$2 billion Capital Beltway project, which made the difference in allowing this major project to proceed. On that project, a \$589 million TIFIA loan leveraged more than \$900 million of private capital and \$400 million of state funds.

This type of program could work in Australia to stimulate private capital investment in transport infrastructure projects of regional/national significance.

The benefits from this type of funding for the government and community are clear. The funding promotes growth, facilitates projects that may otherwise not be feasible, and the money (as a loan rather than a grant) is repaid to the government, and hence can be recycled for new projects.

CONCLUSION

We must harness all of these funding methods to deliver the best 21st century transport infrastructure.

Government money cannot achieve everything that needs to be delivered.

Today, more than ever, there are many internationally renowned companies willing and able to facilitate the financing and delivery of major transportation infrastructure. Governments and private sector parties alike must be flexible—different assets at different stages of maturity will attract varying levels of private sector interest.

The scenarios:

- → For vital infrastructure not readily creating a financial return, government investment is best
- → For heavily utilised assets, user charges will attract private sector investment— injecting new money into the infrastructure development agenda (thereby freeing up government capital to do more and ensuring transparent funding of infrastructure priorities), and
- → For assets in developing areas (and thereby difficult to forecast), it may be appropriate for government to seed fund, create an operating history and then sell—thereby creating the seed funding for the next similar investment.

The facts:

- → There is a massive amount of capital (mainly derived from the superannuation/pension industry) looking for infrastructure investments. Infrastructure investment is not restricted by lack of capital.
- → Private sector funding is not restricted to brownfield/established assets. There is a class of long term operators (such as Transurban) willing and able to invest in greenfield projects.
- → Hypothecation—raising revenue from one asset to apply to the development of another associated use—is a tool that should be explored further.

Ultimately, whether funded by government or the private sector, an asset must provide a public service and improve the community in which it serves.

Our challenge is to bring these worthy projects to reality sooner and more efficiently. Government funding alone will not suffice. The clever facilitation of private capital is a must if we are to ensure our cities remain competitive.



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