Infrastructure Reform[1]

Last year I spoke to this conference about the up-turn of interest in infrastructure investment by governments at all levels.

Not just the newly-elected Abbott government but also State governments, strongly supported by industry groups. All were talking up the prospects of infrastructure investment replacing mining and LNG capital investment programs, as those areas slowed cyclically.

Governments have over the last twelve months generally attempted to live up to this image.

But, as I cautioned last year, the lessons we have learned in the past decade suggest we should not simply rush in to announce the next big project that seems likely to capture the public imagination.

Rushing in to announce big new investments is something that has been quite heavily criticised in the case of, say, the National Broadband Network.

But we have also neglected to undertake projects with high benefit-cost ratios which do not have strong political salience.

And overall the sad thing is, regardless of who is in government, the same rush to announce still seems to be with us.

The sequence of announcing the project concept, then doing the planning — after which the concept is almost always revised — and with the cost-benefit analysis either not done at all (for lack of time) or not released (generally on the unconvincing grounds of commercial sensitivity) is unfortunate.

I won't name individual projects, but in most States we have, since last year, seen exactly that sequence of events.

If this process provided some political benefit, it might be understandable — it would not be supportable, but it might be understandable.

But it seems not to do that, either.

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[1] Keynote address to Infrastructure Partnerships Australia's *Partnerships 2014 – Infrastructure and Investment Conference* in Melbourne on 12 September 2014.

Instead, far from a swift move after the press release into a tender process and the commencement of construction — the much-anticipated turning of sods — the next step after the press release is silence.

Silence while the planning is done, the risks assessed, the interaction between the new investment and the existing system considered, and the business case prepared for the public or private financiers.

There may be occasional hints of net benefit for the community, and there will surely be speeches to selected groups of targeted beneficiaries, but the disappointment in broader public terms arises because — far from the implied swift decision-making of the announcement— there inevitably follows a long period of apparent inaction.

Those who work on infrastructure projects know it is not a period of inaction, far from it.

But the government with the action agenda subsequently feels keenly the public disappointment, all of which is generated by the untimely announcement in the first place.

Announcement remorse, you might call it.

It would be refreshing to see government choose in future to do the analysis ***and release it*** first.

My judgment – and I acknowledge it is just the view of a bureaucrat, and it is well known that we have no political nous – is that it is in the interests of governments to do just that, ie first undertake the detailed analysis and release it.

In most cases, this is not beyond the current capabilities of government agencies and key external advisers. We have the analytical resources or we can access them. Unfortunately, we just don't deploy them effectively.

Moreover, and of great interest to this Conference, this is the only plausible way of establishing a pipeline of opportunities. It is axiomatic that to achieve a pipeline's purpose of providing analysable ideas of future investment opportunities in PPPs, and an indication of their timing, you need to publish a sequence of analyses.

It will be of very little use just to publish a snapshot of the ideas of today's governments without comparable analyses. Who — investing seriously — can respond effectively to that?

There is some reason to hope that this will come about. The renewed interest in infrastructure, and the abandonment of the nonsensical view that all debt is bad, provides a context that could see the infrastructure planning and purchasing system reformed.

One contribution to support this is our recently-completed Inquiry into the development and the financing of public infrastructure. It was in effect two inquiries in one, and done at a rapid pace, just on six months from start to finish.

A second cause for optimism is that the Commonwealth Assistant Minister for Infrastructure, Jamie Briggs, released last week a statement on behalf of his colleagues from around the nation which seeks to apply some of the directions we suggested in our Inquiry report.

Our Inquiry was as deep as it was broad. It was well-supported by industry and public sector submissions and there was a high level of public commentary provided by the media.

The breadth of the Inquiry means that today I cannot hope to do it justice by covering all of the significant topics and recommendations. So instead I will try to give you the narrative. And in so doing, I will try to get across why I am optimistic that such a detailed piece of work has a fair prospect of actually being turned into public policy.

There is no doubt that infrastructure investment can be one of the wisest things a government can do for the public. The efficient and equitable provision of safe and reliable means of communicating, of delivering, of powering and of sewering a society are core public interest reasons why we have governments. We want these services provided cost-effectively, for sure. But above all, we expect they will be there for our homes and businesses, for our children to gain an education and for us to get to and from our jobs, regardless of where we live in Australia. There is a fundamental equity aspect to the public provision of infrastructure that makes it a natural place for good government to meet its commitment to its citizens.

But it is not essential that government does all of this in-house.

This is pretty obvious nowadays, in relation to design and construction: the public works Department has been outsourced. Our society has evolved to a level that allows not just private building of infrastructure on behalf of government, but full private provision of services, where government simply retains the role of ensuring access is fairly made available between consumers.

That word ‘simply’ might be a little misleading. The judgments on access will be subjective ones, but that is after all a natural role for elected representatives.

Where evolution is yet to be seen is in the processes for selecting and financing the projects. And that is what I will discuss today.

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The Inquiry report does not act as a cheer squad for shifting all responsibility in future to the private sector.

There is explicit recognition that the private provision of infrastructure will occur only where there is a profit motive to do so.

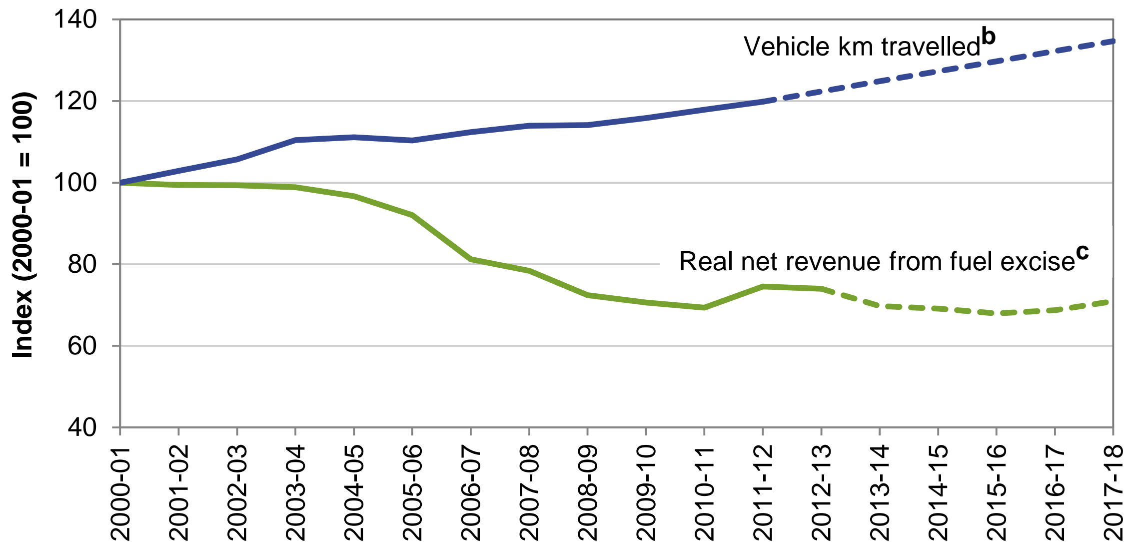
And even more importantly, recognition that regardless of who plans and builds the infrastructure, the cost will have to be paid either directly by users and other beneficiaries; or indirectly by taxes.

We use the phrase ‘no magic pudding’, quite deliberately. Getting debt off government books and onto the books other entities or Special Purpose Vehicles only reduces the actual liabilities of governments if accompanied by effective pricing for using that infrastructure; and sustainably transferring risk as a consequence.

Pricing reform is not just essential to managing liabilities; it is also essential if we are to meet our expectations for ever-increasing quality and quantity of infrastructure services.

There are many figures and tables in the Report but probably the most telling is this one:

Figure 4.1 **Road use and fuel excise, 2000-01 to 2017-18[a]**



Source: Productivity Commission 2014, *Public Infrastructure*, Inquiry Report No. 71, Canberra. Volume 1, p.155.

This Figure is about roads. The Inquiry looked very closely at the situation with regard to roads, both funding and governance. By governance, I mean the structures we use to allocate resources.

Because in the wider economy, we generally use prices to allocate resources. This means projects are often self-selecting – they're the ones consumers will pay for. Prices follow – or try to influence, which amounts to the same thing — consumer preferences. But not so much in infrastructure.

Of course, we do charge people for their use of some infrastructure – electricity networks, water systems – but these are about cost recovery. It isn't consumers who are making the decisions – engineers and regulators are determining who will receive what service.

We can see what happens when we actually want to introduce some better form of allocating access — say, one reflecting the preferences of users — when there is a drought or a power shortage. We don't use price. Price in those areas of infrastructure is limited to cost recovery, not about efficient allocation; or even fair allocation (asking the average household to put in water tanks during the last

drought in Melbourne wasn't particularly equitable; neither was the subsidy available to some households for solar panels).

And in roads, well, there isn't even cost recovery.

The Figure on the slide contains a close proxy for future expectations of road provision – the vehicle kilometres travelled on average in Australia each year.

And contrasted against this is the trend in revenue from the primary Federal source of 'payment' for roads, the fuel excise. It generously includes the Budget proposal for restoration of fuel excise indexation, although that is now in some doubt.

Despite this generosity, the gap and the direction of change, is very clear: our expectations are not going to be met from these payments.

We do acknowledge in the Inquiry that there are arguments that can be made about other funding sources – quite significant ones, such as registration charges – which reduce the size of the gap. Unfortunately, they do nothing to suggest that the gap will close.

Thus we need a new pricing system. And it is possible to envisage one.

Technology is inevitably transforming our vehicle fleet so that each vehicle will be independently identifiable – conceptually, in the same way as mobile phones. Each vehicle will communicate with roadside monitors; and with each other.

The US Government has recently announced that it is intending to mandate such technology for vehicles sold in the US. The force behind this is probably irresistible – it is safety, since the technology the US plans will be designed to reduce collisions, in the same way that aircraft today avoid collisions.

The National Highway Safety Administration suggests 600,000 collisions could be avoided in the US each year, and many lives saved.

And it won't hurt that there are US firms very interested in these applications. You've heard, I'm sure, of the Google cars that have for some time now been logging up thousands of miles in driverless form on US roads. They're not alone.

This technology may sooner rather than later deliver the capability for a new pricing system.

Capability does not of course guarantee application. No one expects this to reform road pricing overnight.

However, the incentive beyond safety that encourages take-up of technology like this lies in the Figure above: we will need a new pricing system.

But it won't be a tax. And it won't apply everywhere. Yet without it, taxpayers will foot more and more of an increasing roads bill.

Even the wider use of toll roads will be insufficient to offset the gap. As a number of failed toll roads have proven, there is a limit to the use of the toll. Whereas electronic prices need only be small, measured in the cents, every time your vehicle takes advantage of a bridge or grade-separated rail crossing.

In the short-term, the immediate need is for a new governance structure to allow consumers to influence the priorities for investment. This principle, as I mentioned earlier, is well-accepted in the market economy. And if people are going to be asked to pay directly for roads, then they must first be given a role in assessing the options they are to be asked to pay for.

In practice, this means both heavy vehicle and motorists' associations and clubs can and should be given the opportunity to review the analyses behind future large-scale allocation of public funds for roads.

We have recommended an adaptation of the New Zealand road fund model that would, initially, bring road user groups in to this, the *decision-making* process for major infrastructure.

Such a step would have two major benefits: the knowledge of the limited scope of current funding to meet all expectations would be shared more widely through these groups and out into the community; and the preferences of users could be incorporated into future planning in a way that simple *consultation* does not allow.

Moreover, these groups will only be able to contribute if analyses are made available to them.

That is, this system *encourages* better planning, the largest failure in major infrastructure projects. Effective infrastructure planning desperately needs more incentives like this. A Road Fund model is a win-win for infrastructure investment.

Since the consumer groups – roads associations and heavy vehicle groups – that we advocate forming the road funding model (alongside the traditional roads agencies) would have to be trusted with the analyses – remember, none of them are project constructors, so conflict of interest isn't an issue — the highly doubtful claims of commercial confidentiality when governments do not publish cost:benefit analyses could be put to the test.

And, as I noted earlier, the third win is that publication of these analyses would – once done consistently – create the pipeline of projects that private investors have said they need for superannuation to play an even larger role in investing in long-term infrastructure.

Consequent on publication, and the recent innovation of State Governments being prepared to accept unsolicited bids for private investment, investors too could then actually contribute to planning.

They could moreover do this *in advance* of any commitment by Ministers, assisting governments' decisions on which projects might become Public Private Partnerships and which would remain traditional publicly-funded design-and-construct.

Finally, and I've lost count of the score by now (but it's all wins) the clash between probity and innovation was a constant refrain put to our Inquiry. Getting input on innovation upfront, before tender, from investors on the basis of a strong published analysis document, would be a major improvement on many current processes.

Some of this, of course, *is* done occasionally and informally today. We know that.

That is not a reason to avoid formalising it.

Because there will be no pipeline without a formal structure, just as there will be no incentive to design and analyse in advance of press release without the involvement as part of the decision-making process of representatives of road "consumers".

And in time, after a few years' experience of governance structures like these across States and Territories, these jurisdictions should be able to call upon Federal funders to align Commonwealth funds with their consumer-driven preferences.

Around that time too, technology and electronic pricing may be able to play their part in shifting roads into a more market-oriented pricing structure, where consumers pay for what they want.

There is much more in the Inquiry report: privatisation; a better role for Infrastructure Australia; the significance of costs like land in the high cost of urban projects; the scope for productivity improvements and reducing cost pressures.

But the overall narrative is one in which we are trying to

align in-depth design in advance of announcement, with

innovation and choice of financier and

greater opportunity for price reform, all of which would sum up to

a better informed public and

investment decisions closer to consumer preferences and

ultimately the creation of the public pipeline of investment opportunities, in cost-effective and well selected infrastructure.

And while roads may seem the dominant focus in this narrative, this is simply because it starts out with the least developed resource allocation system across all of public infrastructure, as I noted to this conference last year.

But don't doubt the benefit of this level of transparency in other parts of infrastructure.

In the last four years, the electricity transmission industry has spent a similar amount on upgrading electricity transmission and distribution as the NBN was originally forecast to cost. These are very large numbers with very large implications. Yet awareness of one is much greater than the other. That is hardly in consumer interests.

And lest it be thought that the emphasis on roads means that rail – in particular urban rail – and other public transport is once again given the short straw, I would observe that nothing will make clearer to the public the value of alternative investments in weekday commuting solutions than the system we are advocating.

Urban rail will not necessarily be able to adopt the pricing reforms we suggest, but as the primary alternative to some major road projects when viewed in terms of outcomes, it can only benefit by better analysis of roads and linkage to consumer willingness to pay.

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As I noted earlier, I cannot do justice to the full Inquiry Report today.

But I did want to make a few final observations about future work as a consequence of this Inquiry, for which we are seeking a Government mandate.

It is quite normal in inquiries of the depth of a Productivity Commission review to come across issues that time does not allow us to pursue if a deadline for report completion is to be met.

An example of this is the apprenticeship system. We have put a specific recommendation to the Government that we be asked to review it in its entirety.

Both unions and employers told us during the Inquiry that the apprenticeship system was struggling.

Submissions pointed to a number of persistent deficiencies in attracting and sustaining apprenticeship levels, such that major shortages occur with the regularity in both downturns – when apprentices are not taken on, by short-sighted management – and in upturns such as the mining boom, where the deferred return from being an apprentice is quite rationally an unattractive option for young people who can obtain high-paying positions with less prescribed qualifications.

It is a complex field, thus the need for comprehensive analysis.

Data shows that apprentice numbers increased strongly in some fields during the boom. As we would all hope they would. But completion rates fell, about 5%. The temporary attraction of higher pay for lower (or no) qualifications was undoubtedly alluring.

And in today's more normal times — to the extent that anything is normal — apprenticeships in some fields still seem to go begging, even though there is increasing youth unemployment. This suggests that the choice to become an apprentice may not be meeting the needs of young Australians either.

The apprenticeship system is rooted in a centuries-old approach to employment when career choices were few. Being apprenticed to a master craftsman was a desirable way to create a life-time career.

It has been preserved because it remains a desirable outcome for society to see practical craftsmanship handed on between generations. But whether that outcome is well-served by the current system is worthy of examination.

It is true that apprenticeship training has been updated on numerous occasions, and today there are quite a variety of incentives and training modules of a more modern vintage.

These are designed to try to offset some of the apparent weaknesses of a system that in effect requires Australians at a young age to make the decision to accept low wages and less security of employment in return for the possibility that, after a number of years of splitting their time between course work and the workplace, they will acquire a qualification that enables them eventually to recover lost income.

A first year welder will make about $10.68 per hour. His mate driving a truck on the same site might make two to four times that, depending on the industry and the location.

It is also likely that the incentives to make a rational choice in favour of deferred income may be weakening, as our society increasingly values immediate satisfaction of needs.

And for adults, the incentives to *retrain* as an apprentice seem even less attractive, for employer and employee.

If an employer is prepared to agree to an adult employee switching to become an apprentice and remain with the firm, that employer generally has to pay the pre-existing wage.

For an unemployed adult with any debt, and certainly with a mortgage, the option to retrain as say an apprentice welder also seems unsustainable.

And completions appear to be a significant weakness. Completions around the 90% level for some higher level traineeships are not unusual. As I noted a little earlier, 50% is more usual for apprenticeships.

The story for both traineeships and apprentice completions is complex. At the PC, we believe we have good capabilities in disentangling complexity.

These factors suggest a comprehensive review of apprenticeships and how incentives inherent in the current structure work or do not work to support entry, completion and retraining.

There have been moves of a fiscal nature this week to alter apprenticeship funding.

To avoid confusion, our suggestion of an Inquiry was aimed at a much wider target than government funding. It is about whether the system continues to serve its original, and still valuable, purpose.

Thank you.