Infrastructure[1]

My current position as Chairman at the Productivity Commission (PC) has given me the opportunity to engage with a wide variety of groups and individuals, from the great and powerful to the unrecognised quiet achievers, and across fields more diverse than any other job I can think of, public or private.

At the Commission, we do deep dives into social and economic issues… a month ago, we published on dying with dignity; this week we are in the midst of a debate over how States share the GST; next week it will be superannuation. A month after that, we will complete our inquiry into competition into the financial system.

The Commission is a unique institution. Some State Governments are now adopting our name and hopefully our methods, but we are still a genuine outlier in public policy development, acting as chief critic and problem-solver of Australia's industry-level public policy.

I'm glad to be in my sixth year of service to the PC, but important as this job is, it's not what defines my life in public policy.

Across the bulk of my working life since the early 1990s, the only constant has been my involvement in infrastructure.

The National Highway System; the original road safety blackspots program; telecommunications; interstate rail freight; urban public transport franchises; airport privatisation; the Channel Deepening project here in Melbourne; the big desalination plant down at Wonthaggi; and the NBN (National Broadband Network). These have defined the jobs I've done.

And even when I worked at Ansett, half of my week - every week - that was not spent with regulators was spent on airport infrastructure.

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1 Infrastructure Partnerships Australia (IPA) Oration on 24 May 2018 in Melbourne.

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The economics of infrastructure is not too hard to work out.

Infrastructure is the platform on which societies and firms construct the future. A weak platform fails to support the weight of these efforts. Societies and firms then suffer, opportunities are lost.

Those of us with an interest can and do argue incessantly about which projects are the next pieces of crucial infrastructure that will justify the huge bills that come with doing anything significant, particularly in urban environments.

But I'm not here to nominate winners tonight.

What I will do is reiterate that **the process** by which we do pick them remains poor, relative to the significance they carry.

We need to persistently make decisions, hopefully better ones due to the intellectual effort of public debate, in order to keep the platform strong.

This word 'better' to me can be summed up as determining, in advance of any commitment of public or private funds, the least risky path to delivery of a known and accepted public interest objective.

These large and very long-term assets are so risky in their early stages that private firms will generally not supply them, which is inherently the reason that governments are involved in so much of infrastructure.

Governments must therefore take some risk.

I just mentioned the NBN, the project that almost dare not whisper its name. I see the media regularly fail to cite it when they talk about Snowy 2 or one of the Connexes as being Australia's biggest infrastructure project. Really, what's hard to spot about $30bn?

I worked on the NBN for four years, heading the Communications Department in Canberra.

We were almost entirely focused on creating that least risky path - for a project that embodied every kind of possible risk, on steroids.

Yet, also know that governments and public servants (and I'm one) are generally deeply risk-averse.

So there is the conundrum. The most risk averse of parties has to become the chief risk balancing party.

That is what we have to solve every time we consider one of these really big things.

A former senior colleague of mine once described advising Ministers on their big risky infrastructure commitments as like swimming with sharks. You never know when one will turn and take a bite out of you.

And in your case, he said to me, you get way too much enjoyment from prodding them as they glide by.

My former colleague was wrong, of course, because - although prodding sharks might be necessary at times - it is inherently dangerous.

And I've managed to survive more than 25 years of infrastructure-oriented jobs by not taking unnecessary risks. So yes, what he had seen was right – I have called out bad decisions before they are made, where I could identify them; and designed work to deliver a public interest objective first, with attention only to other objectives (like vote-winning) where it did not put that in jeopardy.

And to do that safely meant setting and holding on to pretty high expectations of my own.....in particular:

If we say it, we mean it.

In a world where the ability to call a spade a multi-dimensional earth-moving device making a sustainable contribution to thousands of new jobs is on constant display, the ability to speak plainly and argue a position consistently is of immense value to a weary public.

Simple clear communication really matters because our audience in infrastructure is not the people in this room.

It is leaders who can change the nation for the better, but who have plenty of other things to draw their attention.

It is very hard – to take an example from my past – to have a former stock and station agent readily understand the adverse implications of location-specific airport pricing. And even worse if it is the stated policy of his party and the passion of someone well-connected to a Sydney radio host.

So number 1 is clear communication - that works in a public environment.

Second, we must be utterly unwilling to cut corners on the way to getting alignment between the public interest objective, the planning process and the implementation.

Anyone who has worked on the kind of complex projects that make up serious infrastructure investments knows the importance of constant attention to alignment of the parties.

That doesn't mean taking an interminable time to reach a decision. But inconsistency between project planning agency and project implementing entity time and again seems to come back to bite us on the bum in major projects, due to a lack of alignment between the parties, creating undetected shifting of risk.

And third, we all like honesty and enthusiasm but I see them as more than just pleasant human characteristics. They are more essential in our teams even than is subject matter expertise.

When you move from rail projects to airport projects or water projects, as I have done, you can't claim to be an expert in each.

And it's not just me. I brought in a roads guy to build our big desalination project in Victoria. He was brilliant. I know you can buy or build up subject matter expertise.

But at the decision maker level, you can't buy honesty, it has to be inherent.

And for these hardest of all tasks, enthusiasm is the same.

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I'm grateful, as I said earlier to finally be an orator, although I am a bit worried because I think of orators as very old people.

I said this to Vince Graham after his IPA Oration a couple of years ago. He gave me a particularly powerful slap on the back and rejected the idea.

And I now see more clearly now how right he was.

Vince and I go to back to the early 1990s when the Commonwealth Government started to take rail freight seriously.

I worked in Bob Hawke's office back then, on rail reform as part of a set of broader responsibilities in what was then called micro economic reform: transport and communications, along with what became national competition policy.

Most of the things I worked on were successfully introduced as part of a series of packages of reforms, which probably explains my unchanging attachment to the idea of an integrated set of reforms as a method of change.

I'm sorry to say that so far I haven't been so successful that to the current generation of politicians, but we live in hope.

Interstate rail freight long had an ugly economic history.

Going back to the 1970s, it was one of the failed dreams of the Whitlam Government to take control of Australia's inconsistent rail gauges and deliver a national rail network and operator.

Without actually intending to deliver on that dream, but instead focusing on rescuing from near-death a failing State asset which was putting unnecessary pressure on road transport, in 1990 we had put together a plan for the States to surrender their rail freight businesses to the Commonwealth.

In return the Commonwealth would invest $350m (a fortune then, today it buys you 2.9km of rail network from Port Botany) in new rolling stock, terminals, signalling and the like.

The States diddled around for a bit to see if there was more on offer and then jumped on the idea. Off-loading perennial loss-making businesses and their workforces (we had negotiated the co-operation of the rail unions too) was a god-send to them.

In an infrastructure sense, it was a bit of nightmare. The States were to nominate the assets to be transferred. Large swathes of poorly-maintained regional rail network were included. National Rail, our new operator, could either accept the assets or reject them.

At the time, it was considered utterly irrational to separate rail track from above rail operations. Despite their poor condition, no one in the Federal Government had seriously considered rejecting the network assets, as the States could then neuter any operational improvements by not maintaining them; or altering train priorities as they already often did.

Vince had been hired as National Rail's CEO and he told me this in a typically straight-speaking meeting. His executives, concerned for my mental health, sent me books (there were books!) on the lessons of rail transport and the intrinsic linkage between track and train.

Of course, Deutsche Bahn did it subsequently, but at the time we were pioneers.

A bit like the guy who remade baseball by using the data to pick-the-value for money players, my answer to Vince was based on the money. I asked him how he proposed to maintain and upgrade a rail network stretching from outside Brisbane to a hundred or so km outside Perth with the remainder of $350m, now fast being spent on the world's sexiest new rail wagons and terminals.

Now I'm not claiming to be the sole owner of the idea that became the ARTC (Australian Rail Track Corporation). But success always has a thousand fathers and failure is a lonely orphan.

And there was a time when me and two other guys – Leon Welsby at Australian National and Rod Bullock at Booz Hamilton – were pretty lonely.

We had to convince not just Vince and his Board but also the Treasury to fund the capital investment in new rail track infrastructure, just as we do with roads (remember, the Commonwealth was at that time the proud parent of a National Highway System).

This parallel to how we do road investment was crucial to convincing a sceptical Treasury.

And we improved on the road model by seeking out and contracting both new private and public rail operators and charging them per train path, at the minimum recovering the maintenance cost at least of each track section.

We had created rail access pricing.

We called it the road transport model for rail, but from a true cost recovery perspective, it was much better than road transport.

Vince Graham eventually endorsed the idea and did not nominate to take the track into National Rail. We set up a separate entity to manage it, which became the ARTC and guaranteed competitive neutrality between National Rail and any new competitors.

No one but us thought there would be new competitors, but there were. Small, to be sure, but private and efficient. And later, QR (Queensland Rail) moved south.

The ARTC of today is a far more sophisticated entity than we started out twenty odd years ago. But it has been responsible for ensuring that there is a genuine rail alternative to heavy road transport and coastal shipping.

And it has allowed a couple of small private operators, and one large one, to compete with the former National Rail and do so in a manner that ensures that maintenance and some part of capital is recovered, and the track infrastructure keeps up with demand.

I mention this piece of long-ago history tonight for two reasons.

First, because it represents the kind of policy leadership that we don't see much of today.

While a Labor Government initiated these ideas, a Coalition Government – far from rubbishing them - built them up to a sophisticated business enterprise.

And second, because it leads in to the area of greatest failure of my time in infrastructure.

And we always learn more from failure than we do from success – if we survive.

That failure is the lack of a comprehensive approach to road pricing.

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I know your past Chief Executive, Brendan Lyon, has gone on to better things, but I thought I'd still mention a little example to show how much road pricing has been at the forefront of my thinking, even in this job.

A couple of years ago, Brendan asked me to talk to a conference of water infrastructure people.

I looked down the list of luminaries speaking and figured I had nothing to say that one of them would not cover better.

At the same time, we were engaged with a debate in Canberra about whether it would be wise for the new Federal Roads Minister to open up a debate on road pricing.

So I delivered a speech (I'm sure you can still find it) on what road policy could learn from water policy. So there was a sort of tangential link to Brendan's conference theme.

But just to make sure people didn't think they'd wandered into the wrong conference, I did mark up the speech to indicate when I was going to move full bore (*) into road pricing, so the water people could go out and get a cup of coffee.

But no such luck tonight, water people.

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For me, road pricing also dates back to the time I was working on rail reform in Bob Hawke's office. In heavy vehicle road reforms, we had some success on safety and registration issues, but we didn't really get far on pricing.

Twenty-five years on, there is still just a *notional* portion of fuel excise designated as a proxy road user charge for heavy vehicles, and not even that for light vehicles.

In all other areas of nationally significant infrastructure, there is some form of user charging.

The idea that price should affect allocation of future investment is novel in roads, even as it is common in water, energy, airports, telecommunications or ports. Say 'user pays' and while eyes may roll at some regulator decisions, it's well-known what you mean and how it happens in each mode. And it mostly works.

Because of effective pricing, stuff gets built most often where and when people are prepared to pay for it.

The current lack of effective pricing for roads can be explained by the lack of good crisis. If all else fails, you can generally be sure that better policy will be applied as a consequence of that.

And a crisis may be near to hand.

I'm not endorsing the idea that we welcome a crisis, it would always be better to make policy change in advance of distorting the investment scene with a shock.

But the comfort Commonwealth and State Treasuries have at present that what we spend on roads is generally covered by a road tax paid by someone, somewhere is disappearing quite fast.

The pressure on revenue is coming from a set of changes, some of which will be bigger than we expect, and some smaller. But together they look irresistible.

- Electric vehicles - Tesla took $US400m in $1000 deposits last year for its new Model 3.
- Every major vehicle manufacturer, including heavy trucks is planning widespread use of hybrid engines.
- Higher fuel efficiency standards are mandated in foreign markets, from where we will in future source effectively all our cars and trucks.
- Amazon-style home delivery services are reducing the need for multiple trips to the shopping malls.

So in my view, the revenue crisis means we will need another source of road charging in the 2020s, lest all the owners of fossil fuel guzzlers end up subsidising all the hybrid and fully electric drivers.

There are a few hesitant signs that the Commonwealth Government might be looking more closely at the coming e-vehicle revolution, after both Infrastructure Australia and Infrastructure Partners Australia (IPA) drew attention to the opportunity to embed a road user charge in e-vehicles, given they will pay no fuel excise.

However, a revenue crisis on its own probably won't be enough.

Governments can and will undoubtedly do a little more to defer fiscal impacts by means of more toll concessions and availability payment type schemes. For a short time, that might seem less dangerous than road pricing.

But toll concessions and availability can only deal with new infrastructure, under the constraints we mentally place upon ourselves.

We will need to make that mental shift from paying only for new roads to paying for a mix of older and newer roads and related projects - because the misallocation of resources that will occur if we don't will skew our future new road funding towards investments that can be turned into concessions. And that is not at all efficient.

Furthermore, from a social perspective, the feeling amongst outer urban commuters having to pay for their new roads while inner urban residents with newer cars do not isn't going to help bigger arguments that may emerge in the same time frame over social trends like income inequality.

And finally, we should recall for a moment what we can learn from user pays in all other major infrastructure:

If we have no market-based linkage between what an individual chooses to pay for and what projects are subsequently funded, we misconstrue the true role of a price in a market-based economy.

To be accepted, even if grudgingly, price has to be about consumers driving suppliers, not the other way around.

This is what electricity transmission and distribution got so badly wrong.

There are those, too, who will have a different argument about pricing – arguing to let general tax revenues pay for more of what we need, and that road infrastructure should always be free.

Here in Melbourne, we have a natural experiment going on with free road transport.

The trams are free in the CBD. Which means on wet week-nights, those wanting to go one or two stops and keep out of the rain pack in and prevent those who need the tram in order to get home from getting on.

When road use is free, demand keeps piling in.

Free is not all it's cracked up to be.

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Curiously, the first step to do road pricing properly is actually **not** to start setting prices for road access.

No consumer, no heavy vehicle operator can have any confidence in suddenly having to pay for a road that yesterday was apparently free.

You can guess the right first steps if you go back to what I said in opening this address:

- Identify the public interest objective and be open about it, using language that is clear – in this case, we have to pay for what we need and we aren't doing that.
- Establish a structure that aligns the funds raised (today, and forever) from road use with the selection of projects to be funded in future. There's a very good Productivity Commission guide on how to do that (published in 2014 and updated in 2017).
- Involve credible third parties in establishing the linkage between consumers and the projects. These consumer representatives are ready-made in roads – the RACV and its equivalents around the country.

The biggest gains to this reform do not lie in getting more revenue. That will just be the catalyst.

The true public interest objective is a system that selects the right projects – projects where, as in other forms of infrastructure, people have a choice and yet show they are prepared to pay for.

We can sell that, surely.

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I was also thinking of talking tonight about airports, water projects or telco.

But not much, you'll be relieved to know.

Some of the most enjoyable work I have ever done has been in those fields. And like the ARTC, the policy models that I worked on which underpins these parts of our national infrastructure still function pretty well today, twenty or more years on in some cases.

There are critics - of airport price-monitoring, or the size of availability payments for desalination or how much optical fibre future-proofs a digital network against capacity choking.

But from the bigger picture perspective, the public interest objective is generally being served.

We can always do better, by not changing plans simply because the government changes and by always doing the assessment and planning work upfront - and openly - before the announcement rather than after it.

There are newish bodies to help with this: Infrastructure Australia and its NSW and Victorian counterparts have settled in to useful roles.

The limits of what we can do to improve our total infrastructure platform as a nation are now more created by our own unwillingness to double down on what we know works – prices that allow for user choice, mostly; and thoughtful government management of risk where too big for any single firm or the general public to bear.

By comparison, populist subsidies, complex committee of management structures and slogans as substitutes for decisions are a terrible burden to place on investments whose size is measured in points of GDP and last for fifty or more years.