

Independent review of Infrastructure Australia

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This submission draws on research conducted at the University of Wollongong. However, the views expressed are those of a personal professional nature.

It is submitted that the establishment of Infrastructure Australia was a good move, and in recent years, it has produced some reports of value, including the cost of congestion in major cities (Urban Transport Crowding and Congestion, 2019) and the need to expedite reservation and protection of transport corridors. Plus the 2018 report Prioritising Reform.

However, despite some good work, Infrastructure Australia has made some questionable decisions in recent years.

Firstly, the apparent support given to Westconnex in Sydney and now the Western Harbour Tunnel and Beaches Link as a Priority Initiative.

Secondly, an unduly tough line on two rail proposals:

A. Completion of the Maldon Dombarton rail link; Infrastructure Australia initially accepting and then in February 2017 declining a 2014 business case of TfNSW; and,

B. In January 2020, Infrastructure Australia made a negative evaluation of the business case prepared by the Australian Rail Track Corporation (ARTC) to upgrade the 316 km freight and passenger line between Melbourne and Albury.

Thirdly, a disinclination to buy into the proposal to construct a 216 km section of track between Border and Gowrie for Inland Rail as dual gauge.

More comment follows on each of these. Some suggestions are then given for future directions.

Roads

1. The clear evidence from both Australia and overseas is that road congestion cannot be eased simply by building more roads.

It is of note that the extent of Australian road investment was called into question by the International Monetary Fund (IMF) as noted by the Australian Financial Review (AFR)¹ that Australia should be spending more on infrastructure, but this should be on rail, airports and seaports rather than roads; also Australia is spending only about half of the 0.4 per cent of GDP it should to each of rail and ports.”

It is suggested that current high outlays in roads by government at about \$30 billion per year could well be reviewed.² This level of expenditure was described by consultants to Infrastructure Australia in a 2014 report *Spend more, waste more* as a "road spend [that] can only be described as hideously inefficient."

¹ AFR 21 February 2018 “*IMF says Australia has overspent on roads*” and AFR 21 February 2018 “*IMF finds \$112b shortfall in infrastructure*”

² Bureau of Infrastructure Transport and Regional Economics *Key Australian infrastructure statistics 2019* notes, inter alia, in TableT1.3 (p4* Total road expenditure by all level of government, for 2017-18–17 for all governments, an outlay of \$30,249 million.

Project such as Sydney's WestConnex and now the Western Harbour Tunnel has attracted much opposition. Here, the City of Sydney and other affected Councils have proposed alternative options.

The 2016 Federal budget drew a reaction from NAB Group Chief Economist Alan Oster of *"infrastructure spending that is still road heavy."*

The efforts made in subsequent federal budgets to have a more balanced investment in rail and road include funding for an Inland Railway and for preliminary studies for Faster Rail to provide improved links between large capital cities and nearby regional cities.

However, the situation of federal outlays between Brisbane and Cairns for land transport that results in billions to the Bruce Highway and little to rail³ is in need of review.

In addition, a concern remains with the sheer amount of government money that is allocated to road projects, despite the lack of true user pays pricing for road use.

As far back as 2009, the Henry Tax Review noted that *"Current road tax arrangements will not meet Australia's future transport challenges."*

The Henry Tax Review made several pertinent recommendations for road pricing reform. These included

Recommendation 61: Governments should analyse the potential network-wide benefits and costs of introducing variable congestion pricing on existing tolled roads (or lanes), and consider extending existing technology across heavily congested parts of the road network. Beyond that, new technologies may further enable wider application of road pricing if proven cost-effective. In general, congestion charges should apply to all registered vehicles using congested roads. The use of revenues should be transparent to the community and subject to further institutional reform.

Recommendation 62: The Council of Australian Governments (COAG) should accelerate the development of mass-distance-location pricing for heavy vehicles, to ensure that heavy vehicles pay for their specific marginal road-wear costs. Revenue from road-wear charges should be allocated to the owner of the affected road, which should be maintained in accordance with an asset management plan. Differentiated compliance regimes to enforce this pricing policy may need to be considered to balance efficiency benefits from pricing against the costs of administration and compliance for some road users.

The need for reform in road pricing has attracted increasing attention in recent years. By way of example, although not a major focus of the 2015 Competition Policy Review, road pricing was considered. In part, the review noted in part that *"... roads are the least reformed of all infrastructure sectors, with institutional*

³ Australian Government funding for the Bruce highway now stands at about \$10 billion whilst the Queensland Government has committed over \$2 billion of funding with no federal funds north of Nambour.

In May 2016 in the Courier Mail in Brisbane, an Engineers Australia Queensland infrastructure spokesman noted that huge numbers of trucks would be funnelled on to the Bruce Highway unless \$2.5 billion was invested in the railway.

arrangements around funding and provision remaining much the same as they were 20 years ago.

“More effective institutional arrangements are needed to promote efficient investment in and usage of roads, and to put road transport on a similar footing with other infrastructure sectors. Lack of proper road pricing leads to inefficient road investment and distorts choices between transport modes, particularly between road and rail freight.

“The advent of new technology presents opportunities to improve the efficiency of road transport in ways that were unattainable two decades ago. Road user charges linked to road construction, maintenance and safety should make road investment decisions more responsive to the needs and preferences of road users. As in other network sectors, where pricing is introduced, it should be overseen by an independent regulator.”

In regards to congestion pricing, the initiative of Infrastructure Victoria in its 2020 revised 30-year strategy in proposing an electronic congestion charging system for Melbourne is of note.

This was introduced in Singapore in 1998, leading to a 16 per cent drop in peak hour traffic by the year 2000, whilst in London, a 2003 congestion charge saw car decreasing by nearly 20 per from 2000 to 2009.

Looking back, it is submitted that Infrastructure Australia could have been doing more on the need to reform road user pricing, and so, **should be paying more attention to the need to reform road user pricing in the future.**

2. Rail

Infrastructure Australia has examined many rail proposals, with its comments generally adding value. This includes their listing in 2020 of an improved Sydney–Canberra rail connectivity and capacity as a Priority Initiative. However, as above, there are two items of concern.

A. In a February 2017 evaluation, Infrastructure Australia found that completion of the 35 km Maldon Dombarton rail link “would not justify its costs”.

This brief evaluation understated the congestion on the existing Sydney to Wollongong railway line. It also overlooked the increasing road congestion on the Mt Ousley highway.

In 2014, the NSW Department of Planning gave approval to Boral to increase road haulage of quarry products from its Dunmore quarry, and stated that *“Boral is unable to increase the amount of product supplied by rail ...as it is unable to gain access to additional rail paths or utilise longer trains;...”*

The South Coast line linking Sydney to Port Kembla was by the mid 2010s operating at near full capacity during the day and for some of the night. The Moss Vale Unanderra line has severe speed-weight restrictions and extra distance for freight moving between Port Kembla and Western Sydney. It was also not operating for several months during 2020,

The 2006 - 07 Sydney Wollongong Corridor Strategy released by the federal Department of Transport and Regional Services with the support of the NSW Government as part of the former AusLink programme identified many transport issues. This strategy noted that the Illawarra rail line faces an effective restriction on freight train operations during peak periods (600 to 900 and 1500 to 1900hrs) and that the Maldon Dombarton line may be able to play a future role and could “remove

bulk freight from the Illawarra rail line and some other parts of the Sydney passenger rail network...."

The strategy noted that the Mount Ousley Road is already at capacity in the morning peak. In the intervening ten years to 2017, traffic on the Mt Ousley Road has increased, and is congested for more hours of each week day than it was in 2007.

B. In January 2020, Infrastructure Australia made a negative evaluation of the business case prepared by the ARTC to upgrade the 316 km freight and passenger line between Melbourne and Albury. This was despite conceding that the present track is substandard and briefly notes it as part of the Inland Rail Project. However, Infrastructure Australia dismissed the currently proposed upgrade as "the current cost of the problems are not nationally significant."

Yet, this track is on the main line joining Australia's two largest cities. The Sydney Melbourne corridor has the largest volumes of inter-capital city freight, which increasingly goes by heavy trucks on the Hume Highway, with increased fuel use, emissions and road crash risk than when moving freight by rail.

In May 2008, it was announced that joint Federal/ARTC/ Victorian \$501 million North-East Rail Revitalisation Project would proceed along with a 45-year lease of standard gauge track to the ARTC. The project includes upgrading the standard-gauge line between Melbourne and Seymour including new passing loops, upgrading and conversion of 200-km of broad gauge track between Seymour and Albury to standard gauge and a five km rail bypass of Wodonga.

The aim in 2008 was to build: "*...an interstate rail freight super-highway and deliver major passenger rail service improvements ...*"

This aim was not achieved.

It is also of note that this track once allowed Victorian Railway to run the Spirit of Progress train between Melbourne and Albury, that when commissioned in 1937 was the "*finest and fastest train in the Southern Hemisphere.*"

Further comment is given in the article <https://theconversation.com/more-than-ever-its-time-to-upgrade-the-sydney-melbourne-railway-187169> August 4, 2022 by this writer and an editor. In brief: it's 14 years since former NSW rail chief Len Harper [described](#) the rail link between Australia's two largest cities, Sydney and Melbourne, as "*inadequate for current and future needs*".

And it's 31 years since former Prime Minister Gough Whitlam put the problem more bluntly during a TV interview: *there are no cities in the world as close to each other with such large population as Sydney and Melbourne which are linked by so bad a railway.*

Despite remedial work by the ARTC since it leased the NSW section of track, the rail link's most serious problem – its "steam age" alignment – remains....This, coupled with low road-access road pricing for trucks – has reduced rail's share of palletised and containerised freight to about 1 % according to Pacific National. The consequences include an increased risk of fatal road crashes, higher highway maintenance costs, pressure for more road upgrades, and increased emissions.

A detailed 2001 ARTC track audit identified how 197 kilometres of new track built to modern engineering standards – including three major deviations from the existing alignment – could bypass 257 km of substandard track. Freight train transit times would then be reduced by nearly two hours.

Along with improving resilience of the track to the impacts of climate change, if Australia is serious about decarbonisation, the effort must extend to transport. A significant portion of road freight and passengers will need to shift to rail. As the

International Energy Agency noted last year, “Rail transport is the most energy-efficient and least carbon-intensive way to move people and second only to shipping for carrying goods.”

The agency also stressed that “aviation growth will need to be constrained by comprehensive government policies that promote a shift towards rail” in order to achieve net-zero emissions.

If Australia fails to bring the Sydney–Melbourne track into the 21st century, we can expect not only excessive greenhouse gas emissions but also growing costs from many more trucks on the Hume Highway. Congestion at Melbourne and Sydney airports will worsen, and Australia will be left increasingly out of step with other countries in Europe, North America and Asia.

3. Inland Rail query

Infrastructure Australia in May 2016 rated *Inland Rail* as a Priority Project on the Infrastructure Priority List, and noted the option of using dual gauge in Queensland. This was also noted in the 2015 Business Case for Inland Rail prepared for the ARTC.

As noted in the EIS for the Border to Gowrie section of Inland Rail, it appears that all but 7 km of a mixture of 216 km of new or upgraded track is proposed to be dual gauge. The 7 km of standard gauge only is from the NSWQld Border to Kildonan, near Kurumbul.

This is opposed to:

EITHER converting near Kurumbul (174.13 km from Warwick ref QR South Western System Information Pack) to Thallon (350.07 km from Warwick) (light rail at most 47 kg/m) – some 176 km plus six crossing loops - to standard gauge. This could be done in an economical manner (as per Esperance to Kalgoorlie about 390 km about the time that Kalgoorlie to Perth was converted by 1969 to standard gauge)
OR If Queensland insists in retaining narrow gauge for near Kurumbul to Thallon, then they will need to access it through Warwick, with dual gauge only for Whetstone (134.39 km from Warwick) to Kildonan.

It is highly likely that either of these options would cost appreciably less than constructing dual gauge at 60 kg/m on 209 km of track with its crossing loops. The lower cost is in part because there will be less rail used. There will also be ongoing and significant savings in track maintenance costs.

In July 2021 a request was made by this writer if Infrastructure Australia would consider approaching both the ARTC and the Queensland Government to review the dual gauge proposal between Border and Gowrie.

A letter dated 22 July 2021 was sent to the then CEO of Infrastructure Australia could take an interest in the dubious proposal for most of the Border to Gowrie Section of Inland Rail for dual gauge track to be used on this section.

Advice was sent that day from Stakeholder Engagement

Thank you for your email which I have passed to our Infrastructure Assessment and Prioritisation teams for review. I have also forwarded to our CEO for her attention.

Infrastructure Australia’s review of the Inland Rail business case was based on information provided by the proponent at the time of the evaluation. The project proponent is responsible for the proposal submitted to Infrastructure Australia, so we suggest you also raise these perspectives with the ARTC’s Inland Rail.

Somewhat disappointingly, no reply was received from the then CEO.

4. Future Directions

The review of the operations of Infrastructure Australia is considered timely.

It is submitted that special consideration should be given to the need to reduce emissions in transport.

Here, data from Bureau of Infrastructure Transport and Regional Economics *Key Australian infrastructure statistics 2019* show, since 2005, to 2019, roughly, for CO₂-e:

- * emissions from cars up 16 per cent;
- * emissions from articulated trucks up 32 per cent; and,
- * emissions from domestic aviation up 50 per cent.

Turning this around will be a real challenge for Australia.

The Bureau of Transport and Regional Economics under produced a report in 1996 *Transport and Greenhouse* with 16 measures for reducing greenhouse gas emissions in transport.

The BTRE in 2002 with a report *Greenhouse policy options for transport 2020* revisited the issue, with some 11 groups of measures to reduce vehicle kilometres travelled (VKT), 9 measures to reduce emissions per VKT, 4 road pricing measures (mass-distance charges for heavy trucks, tolls, internalising transport externalities and emission charging), carbon taxes and tradable permits.

Of the policies examined, optimal road pricing was judged "...to offer the largest potential for reducing greenhouse gas emissions from transport by 2010".

Getting some mode shift of freight from road to rail was held in the 1996 report to be a 'no-regrets' measure.

To get such a shift will require, along with road pricing reform, some long overdue truck upgrades. This will range from rehabilitating a degraded Victorian rail freight network afflicted with operations over track with two gauges, to straightening out interstate networks including parts of the track between Melbourne Sydney and Brisbane, and also some sections of Brisbane to Cairns track. It is also desirable that the new Inland Rail be built to a high standard in terms of minimum radius of curvature to allow for faster freight trains, with a Melbourne – Brisbane transit time of about 22 hours as opposed to the current service offering of 24 hours.

In the past 30 years, much attention has been paid in Australia to significantly improving road freight productivity. Some attention is now needed to significantly improving rail freight productivity

Hopefully, a revamped Infrastructure Australia can play an effective role in assisting the Australian Government in its commitment to reduce carbon emissions by 43 per cent on 2005 levels, with this to extend to transport.

