

2019 – 20 Pre - Budget Submission re land transport etc

Philip Laird, University of Wollongong, December 2017

This submission updates earlier pre-budget submissions of this writer, including for 2018-19. The views are those of the writer, and not necessarily the University of Wollongong, with some comment taken from other submissions to the Australian Government and from various issues of Track and Signal magazine.

1. The need for investment in both roads and mainline rail track continues. This is at a time that on the one hand Australia continues to have strong population growth, and on the other hand, the Australian Government remains under some fiscal constraint.

The 2015 National Infrastructure Audit of Infrastructure Australia highlighted the need for Australia to respond to a growing population with increasing road congestion.

Australia's population now exceeds 25 million and there is a rail infrastructure deficit in Sydney, Melbourne and Brisbane as well as parts of regional Australia.

The cost of road congestion in Australia's capital cities was estimated by the Bureau of Infrastructure Transport and Regional Economics to be \$9.4 billion in 2005 and to rise to \$20.4b by 2020.

2. The clear evidence from overseas is that road congestion cannot be eased simply by building more roads. Moreover, some road investment has been called into question, as indeed it was by the people of Western Australia in March 2017 in voting for a new State Government that cancelled a proposed Perth Road Freight Link. New Zealand's change of government later in 2017 was a further move from a government favouring roads to one supporting a more balanced approach in funding roads and rail track.

It is suggested that current high outlays in roads by government at over \$26 billion per year could well be reviewed.¹ 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 Bureau of Infrastructure Transport and Regional Economics (BITRE) *Key Australian infrastructure statistics 20186* notes, inter alia, in Table 2 Total road expenditure by all level of government, for 2016–17 for all governments, an outlay of \$26 094 million (and an extra \$1981m by public non-financial corporations).

Thus, projects such as Sydney's WestConnex that has now blown out to about \$17 billion and duplication by 2020 of the Pacific Highway (taken to task by Infrastructure NSW in its 2012 report²) could well be reviewed. In particular, Stage 3 of WestConnex has attracted much opposition and the City of Sydney has 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 the 2017 and 2018 federal budget to have a more balanced investment in rail and road are noted with appreciation. This includes funding for an Inland Railway and for other rail projects.

However, 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.

The situation of federal outlays between Brisbane and Cairns for land transport that results in billions to the Bruce Highway and zero to rail³) is also in need of review.

Road Pricing

3. There is a need to address, congestion pricing in Melbourne and Sydney, and implementation of mass-distance location road user charges for B-Doubles.

In regards to congestion pricing, the initiative of Infrastructure Victoria in its 2016 30-year strategy in proposing an electronic congestion charging system for Melbourne is to be encouraged. This was introduced in Singapore in 1998, leading to a 16 per cent drop

² In 2012, Infrastructure NSW [p143] noted that due to the relatively low traffic volumes on the remaining sections, the economic merit of their reconstruction is much lower at 0.8 (Benefit Cost Ratio) than that of the Highway as a whole; also "*...given competing priorities for NSW and Commonwealth Government funds, the high cost and relatively limited benefits of these remaining sections raises questions ... appropriate scope of works and priority for those sections with relatively light traffic.*"

There is a long overdue grade separation project at the foot of the Mt Ousley Highway in Wollongong which has at least three times the annual average daily traffic (over 53,000 including some 7960 trucks) than does 'remaining sections' of the Pacific Highway.

³ Australian Government funding for the Bruce highway now stands at \$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.

in peak hour traffic by the year 2000, whilst in London, a 2003 congestion charge saw car decreasing by nearly 20 per cent from 2000 to 2009.

4. Fuel excise is now being indexed on an annual basis. However, there was a long period between 2001 and 2014 when it was not been indexed, and was stuck at 38.143 cents per litre. The loss of Commonwealth revenue from freezing fuel excise indexation was estimated in Treasury Budget Paper #2 (May 2001) at \$150 million for 2001-02 increasing to \$1135 million for 2004-05.

A Fuel Taxation Inquiry reported in 2002. Although its recommendations were pragmatic they were rejected by the Government of the day. As noted in an earlier pre-budget submission: The difference in total fuel excise collection during 2011-12 for petrol used in cars etc between the indexed and frozen rate would have been about \$2.48 billion; also for 6.3 billion litres of diesel used by trucks during 2011-12, the forgone revenue from rebates was about \$1.9 billion. ***Accordingly, the combined forgone petrol and diesel excise during 2011-12 was estimated at about \$4.4 billion.***

5. Fuel excise is currently 41.2 cents per litre (as of 1 August 2018) but this is some 20 per cent less in real terms than what it was in the year 2000.

There is a case for fuel excise in Australia to be increased by 10 cents per litre to allow for lower annual registration fees for cars; and, to fund ongoing calls for more money to be spent on roads, and alternatives to roads including rail, urban public transport and cycleways.

There is also a good case for scrapping the diesel rebate.

6. New Zealand has increased its petrol excise more than 10 cents a litre since March 2002, and is currently 63.024 cents per litre allocated to the National Land Transport Fund. Annual registration fees for cars in New Zealand are much lower than in NSW and other states. A further 6 cents per litre is collected to be applied to motor accident compensation and in Auckland, a further 10 cents per litre is levied for regional transport. It is of note that higher fuel taxation has not stopped the New Zealand economy performing well.

7. Mass distance location charges for heavy trucks in Australia are long overdue. Incredibly, a National Transport Commission 2015 paper on road user charges, complete with nine options looking at pay as you go (PAYGO) methodology did not even raise the option of mass distance charges. This is despite Infrastructure Australia calling for a user-pays approach to provide greater fairness in the way Australia pays for its roads to include the introduction of direct heavy vehicle charging.

Meantime, aggregate revenue from truck registration fees and road user charges set in 2016-17 at a modest 25.9 cents per litre has been frozen until 2018 and now 2019 by Transport Ministers. This low road user charge for trucks is less the late 2018 (now indexed) 41.2 cents per litre on petrol and diesel for cars.

8. New Zealand has had since 1978 mass distance charges for heavy trucks. Currently, a heavy semitrailer with six axles pays 56 cents NZ (about 52 Aust cents) per kilometre. In Australia, the same truck hauling 100,000 km a year or more pays registration and fuel road user charges working out to less than 17 cents per kilometre.

A 2014 Heavy vehicle charges determination of the National Transport Commission (NTC) noted a then recent estimate of the numbers of six axle articulated trucks (semitrailers) as 42,522 moving 3093 million km and using 1579 million litres of diesel. If we use these figures with current NTC charges of \$6232 registration and the discounted road user charge of 25.8 cents per litre (motorists pay over 40 cents a litre excise), we get a contribution of about \$265m in registration fees and \$407m in fuel based road user charges. This is a total of \$672m.

Now apply the New Zealand mass distance charges to the 3095m kilometres of semitrailer haulage in Australia to get \$A1547m. This amount is \$875m than the above \$672m Australian amount.

A similar calculation for 12,811 B-Doubles noted in the 2014 NTC determination that hauled some 2189m kilometres in 2013 using some 1313m litres of fuel is now done. Most B-Doubles have a registration fee of \$14,776 giving some \$189m in registration fees. Add to this \$339m in fuel based road user charges to get \$528m.

If current New Zealand road user charges at 62 cents NZ or 56 cents AU per kilometre were applied to the 2189m km, a total of \$1226 would result. The NTC aggregate charges for all B-Doubles are then \$698m short of the NZ charges.

If one accepts that the New Zealand charges are user pays, then the operation of six axle semitrailers and the nine axle B-Doubles on public roads are in receipt of an annual hidden subsidy of nearly \$1.6 billion per year.

This amounts to about 1 cent per net tonne kilometre.

9. It is now over 12 years (yes, twelve years) since 2006 when the Productivity Commission issued a report on road and rail access pricing that found the National Transport Commission (NTC) charges to be “*conservative*” and made recommendations that CoAG take up road pricing. By 2009, delays were being encountered by the CoAG process and in 2010, the Henry Tax Review made several pertinent recommendations for road pricing reform.

These included one that CoAG *“should accelerate the development of mass-distance-location pricing for heavy vehicles...”*

In 2017, the Department of Infrastructure and Regional Development undertook a public consultation process to seek public and industry views on options for independent price regulation of heavy vehicle charges. This included the option of ACCC being the regulator. The progress apparently made in 2018 to this outcome, at least in the public domain, is not good enough.

In the meantime, incredibly, despite arguably high ongoing subsidies to trucks hauling heavy loads large distances each year, the Transport and Infrastructure Council saw fit to freeze annual registration and fuel road user charges for another two years.

10. In New Zealand, from the 2017-18 NATIONAL LAND TRANSPORT FUND ANNUAL REPORT, it is noted, inter alia, gross revenue in millions as follows:

Fuel excise duty \$1957

Road user charges \$1594

Motor vehicle registration and annual licensing fees \$228

The total is \$3.78 billion.

It can be seen that road user charges in New Zealand, which are mostly made up of mass distance charges levied on heavy truck operations, account for some 42 per cent of all revenue to the land transport fund.

By way of contrast, as noted by the NTC, in its February 2015 report *Heavy vehicle road user charge annual adjustment Consultation report 2014–15* noted, inter

alia, an aggregate heavy vehicle road users charge of \$1,820,198,117. (6,963,267,471 litres multiplied by a road user charge of 26.14 cents/litre) along with estimated registration revenue of \$1,188,014,361 (\$811,170,575 powered units only and trailers \$376,843,786). Together this is \$3008 million.

As noted in last years pre budget submission, BITRE estimated the total road expenditure by all level of government, for 2014–15 for all governments, as \$ 23 464.8 million.

This means, at first sight, heavy vehicle charges in 2014-15 were only contributing about 12.8 per cent of all government outlays on roads.

11. It is hard to see why Australian charges for heavy vehicles in aggregate, and annual charges for semitrailers and B- Doubles hauling heavy loads long distances each year, should be about one third of the respective New Zealand charges.

Unless of course, it is part of a de facto policy to put more ‘loads on roads’ and to make rail freight, sea freight, pipelines and conveyor belts financially unattractive for moving most types of freight.

Road deficits

12. The operation of road vehicles imposes appreciable external costs on the community. In a paper *Moving People: Solutions for a Livable Australia* Bus Industry Confederation (2012) estimates of “road deficits” of about \$20 billion pa in 2001 and \$27 billion pa in 2010 were cited. Clearly, some effort should be made to direct more of these costs onto road users as opposed to the wider community.

These estimates compare with a 2001 estimate of a road deficit⁴ of \$8 billion a year of hidden subsidies that do not include the cost of road congestion. Under current road pricing, road deficits are increasing.

These road deficits include an older estimate of a 'road freight deficit' of at least \$3 billion per year.⁵ About half of this amount is unrecovered road system costs from

⁴ Laird P Newman P Bachels M and Kenworthy J (2001) *Back on Track: Rethinking Transport Policy in Australia and New Zealand* UNSW Press

⁵ Laird P (2006) *Freight transport cost recovery in Australia*, Australasian Transport Research Forum. The Henry Tax review in 2010 had a number of recommendations that if implemented would see an improvement in road pricing for heavy trucks.

articulated trucks. The other half is due to the involvement of such heavy trucks in road crashes coupled with other environmental and social costs.

Oil Vulnerability

13. A major input into road vehicle use is that of liquid fuel. In the 12 months ended 30 June 2016, from ABS SMVU data, registered motor vehicles in Australia consumed an estimated 32.7 billion litres of fuel. Of the total fuel consumed by motor vehicles in 2015-16, 53.3% was petrol and 42.5% was diesel. By way of contrast, rail used in 2010 less than one billion litres of diesel for a smaller passenger task but a larger freight task than road.⁶ Rail also uses electricity, produced mostly from domestic coal, then with an oil equivalent of about 1.2 billion litres that year.

Urban rail

14. The BITRE *Yearbook 2018: Australian Infrastructure Statistics, Statistical Report*, notes, inter alia, Table T 5.5a Public transit patronage on heavy rail, Australian capital cities; that in 2013-14, there were 702.9 million passenger movements; also in 2003-04, there were 492.2 million passenger movements; an increase of about 30 per cent, and, far exceeding population growth.

It has been argued above that there is a need to improve road cost recovery.

At the same time, there is a need to improve cost recovery of urban rail operations from train fares. Here, some but not all of the large subsidies to urban rail operations could be better redirected to the necessary rail infrastructure to meet the needs of a growing population. As well, some generous concessions to seniors could be reviewed, both in cost, and whether such concessions can be made use of in peak hours.

There is a need to invest more in urban rail infrastructure at a national level. The additional funds required for such investment may need reconsideration of taxation policies such as dividend imputation credits and alcohol excise.

15. Major metro rail projects are under way in Melbourne and Sydney. There is a question as to whether more federal funding would be appropriate for these projects, and if granted, could expedite their completion. In addition to \$857 million from the Federal

⁶ Australasian Railway Association Australian Rail Industry Report 2010.

Government in the 2016 budget, there is a question relating to Victoria gaining a fair share of the proceeds of the Asset Recycling program.

Brisbane needs a 10.2 km Cross River Rail project from Dutton Park to Bowen Hills, with 5.9 km in tunnel to include five new stations. The Queensland Government has committed funds to the \$5.4 billion project and some Commonwealth funding, comparable to that provided for major roads in Queensland, is needed for this project.

Perth's urban rail system is now arguably the best in Australia and has attracted international attention. However, ongoing improvements in Perth's public transport and road pricing are needed contain road congestion and its negative impact on productivity.

Adelaide's rail electrification programme could well be revived. The work to date has helped lift patronage.

There is an ongoing need for more separation of freight and passenger trains. In Sydney, this would be assisted by completion of the 35 km Maldon Dombarton rail link.

The growth of light rail in Australia is also of note. This includes the Gold Coast with patronage far exceeding expectations when Stage 1 was opened in July 2014 and Stage 2 was opened in early 2018 (contributing to the success of the Commonwealth Games).

Intercity rail

16. The federal funding in the 2017 and 2018 budgets for upgrading existing interstate rail links and for an Inland Railway is appreciated along with the 2016 decision not to privatize the Australian Rail Track Corporation (ARTC).⁷

However, more funding is needed to bring the interstate rail network and new construction of an inland railway towards Canadian and US Class I Railroad standards. Or even the standards agreed to in 1997 by the Australian Transport Council which included freight trains with reasonable axle loads averaging 80 km/h.

It is of note that the current ARTC service offering for the 1700km inland railway is 24 hours. That is an average speed of about 71 km per hour. In the twentyfirst century, Australia should be able to do better than this.

⁷ Track leases made by government to the private sector that were eventually reversed include those of Britain, New Zealand, Tasmania and Victoria. Further details are given in a 2013 paper, of this writer, called *Government rail asset sales, and return to the public sector, in New Zealand and Tasmania* Research in Transportation Business & Management Vol 6 2013.

Some track straightening of the existing lines to allow for Fast Freight Trains and Fairly Fast Passenger trains is needed. This is pending the construction, if ever, in Australia of a High Speed Rail (HSR) network for trains running at speeds of at least 250 km/h.

In December 2018, the NSW Government announced its intention to investigate either the upgrading of the main railway tracks from Sydney to Newcastle, Wollongong, Canberra Goulburn and Orange/Parkes or building dedicated high speed track on these four corridors. Whilst it can be argued that federal government has given NSW over \$4 billion for its part of the Snowy Mountains scheme and this could be applied to intercity rail in NSW (as suggested by former Prime Minister Turnbull in March 2018 when visiting Port Kembla), there is also a case for some federal funds for regional rail in NSW comparable to that already advanced/ committed to Victoria of about \$1.5 billion.

Rail corridors

17. In December 2016, the House of Representatives Standing Committee on Infrastructure, Transport and Cities released its report *Harnessing Value, Delivering Infrastructure*.

Much evidence was received and noted on the need to identify and protect corridors for future railway lines. The Committee noted, in part [p151] “*Corridor preservation, especially for major projects such as HSR is very important. The ability to protect corridors ensures that transport infrastructure will follow the optimum route. Failure to protect corridors will mean compromises in planning and significant increases in cost.*”

It is not just for High Speed Rail, but also rail freight and medium speed passenger rail, the corridor protection is needed. Two further indications of concern are that of Infrastructure Australia in its July 2017 report **Corridor Protection: Planning and investing for the long term**.

This paper urges Australian governments to take urgent action in the next five years to protect vital infrastructure corridors, to avoid cost overruns, delays and community disruption when delivering new infrastructure. The paper shows that protection and early acquisition of just seven corridors identified as national priorities on the Infrastructure Priority List could save Australian taxpayers close to \$11 billion in land purchase and construction costs. These seven strategic corridors are:

- East Coast High Speed Rail
- Outer Sydney Orbital
- Outer Melbourne Ring
- Western Sydney Airport Rail Line
- Western Sydney Freight Line
- Hunter Valley Freight Line
- Port of Brisbane Freight Line

This writer would like to go further than Infrastructure Australia in that urgent corridor protection could well be accelerated with federal funding. Alternatively, federal budget sanctions could be used against State Governments who through “inefficiencies and obstruction” fail to do the right thing (to cite Leitch DB (1972) *Railways of New Zealand*, p51 re abolishing the provinces in 1876 and vesting all railway construction and control in the central government).

Identifying and protecting corridors for upgrading existing rail track and for new track could usefully receive federal funding could be done in a manner similar to the long standing federal funding of advanced planning of certain highway projects (such as the Pacific Highway in NSW). In particular, rail corridors should be reserved for new railway lines to Melbourne’s Tullamarine airport, and the new Western Sydney airport.

Conclusion

18. Australia's population has now reached 25 million people.

With the result of population increase to date, Australia now has a rail transport infrastructure deficit. Now, more than ever, Australia needs to change its outmoded land transport policies. This includes in the budget process a rebalancing of federal government outlays on rail and road, along with serious attention being given to higher fuel excise along with independent price regulation of heavy truck road user charges. Wider taxation reform is also warranted.

It is not unknown for the Federal government to make certain payments to the States conditional on specific reforms. Here, it should be possible for Treasury and or Finance to make payments for roads conditional on improved road pricing.

Funding for rail corridor preservation is now needed as a matter of urgency.

Associate Professor Philip Laird, Ph D, FCILT, Comp IE Aust
 Faculty of Engineering and Information Sciences
 University of Wollongong NSW 2522
 January 2019