

Second supplementary submission
to the House of Representatives Standing Committee on Economics
Inquiry into raising the level of productivity growth in the Australian Economy

Philip Laird, Comp IE Aust FCILT University of Wollongong, February 2010

This supplementary submission, like earlier submissions has drawn on research conducted at the University of Wollongong. However, it does not necessarily reflect the views of the University. The main term of reference addressed is "the adequacy of the level of investment in public infrastructure", with a particular reference to land transport.

This submission will follow up on items raised at the hearing on 4 December 2009 at Sydney. The comments are on data, some costs of road freight, scope for track straightening on the existing North South rail corridor, and high speed rail.

Data deficiencies

The concern expressed at this hearing on data deficiencies in land transport reflect those noted by the House of Representatives Standing Committee on Transport and Regional Services in its 2007 report *The Great Freight Task: Is Australia's transport network up to the challenge?*

This 2007 report, on pages 27 and 28 has comment on data deficiencies in land transport going back to 1999, and reiterated in 2004, with a strong recommendations made in 2007 as follows.

Recommendation 1

The Committee recommends that the Minister for Transport and Regional Services require the Australian Transport Commission and the Bureau of Transport and Regional Economics to undertake the establishment of a national transport database.

Recommendation 2

The Committee recommends that the Minister for Transport and Regional Services urgently initiate legislation requiring transport industry operatives to supply essential information for the proposed transport database.

At the time of writing, the government is yet to respond to these two (and the other 23) recommendations of this 2004 Committee Report. The recommendations still stand, and may warrant consideration by the House of Representatives Standing Committee on Economics.

2. Some costs of road freight

To extend earlier comment on some of the costs of road freight, attention is drawn to road crashes involving articulated trucks on NSW roads just before and during January 2010.

In early 2010 media attention was focused on two multiple fatal road crashes involving articulated trucks on NSW roads. However, in the 24 days from 28 December 2009 to 20 January 2010 there were seven fatal crashes involving articulated trucks on NSW roads reported by ABC news (<http://www.abc.net.au/news/tag/road-accidents>) with the loss of no fewer than 13 lives:

- (a) On 28 December 2009, a fuel tanker crash on the Princes Highway south of Ulladulla,
- (b) On 5 January 2010, a car-semitrailer crash on the Newell Highway south of Narrandera,
- (c) On 6 January 2010, a car-semitrailer crash on the New England Highway near Musselbrook,
- (d) On 8 January 2010, a car-semitrailer crash in the Upper Hunter Valley,
- (e) On 15 January 2010, two semitrailers collided on the Hume Highway near Woomargama.
- (f) On 20 January 2010, a truck trailer rolled over, at Menangle Park in south west Sydney.
- (g) On 28 January 2010, a stock truck and car collided on Waterfall Road 14 kilometres west of Dorrigo.

To this may be added a serious injury crash on the Pacific Highway just before five o'clock in the morning of 11 February 2010 "when a B-double hit a car about two kilometres north of Ulmarra."

The first three fatal crashes and related issues received wide media coverage including the Sydney Morning Herald (December 29, 31, 2009 January 6, 7 2010 with an editorial "Addicted to trucks" questioning calls to move some road freight to rail), and, the ABC TV 7:30 report for 6 January 2010.

Amongst the issues raised were road pricing for heavy trucks and a late 2009 decision of Shell Oil to cease using rail for bulk haulage of fuel from Sydney to Canberra, Wagga Wagga, Dubbo and Tamworth.

In Australia, the continued over-representation of articulated trucks in fatal crashes per either number of vehicles registered (for example, in New South Wales 26.1 per 10,000 articulated trucks cf 0.9 per 10,000 passenger vehicles) or as a fraction of vehicle kilometres driven, with other factors, suggest that stronger measures are needed to continue to improve heavy vehicle safety.

3. Track straightening

Subsequent to the hearing on 4 December 2009, the report of the Review of the National Transport Commission was released. It notes in part "*As a result of lack of investment in rail infrastructure, the average speed of trains on the Melbourne-Sydney-Brisbane line remains slow. ... The resulting increase in travel times reduces the ability of rail to compete with road.*"

In addition, as noted by the BITRE (2009 IS 34 - *Road and rail freight: competitors or complements?*) is the fact (page 9) that "*... continued investment on the Hume and Pacific Highways will help improve transit times and reduce road freight operating costs, countering somewhat the improvements on rail*"

To quote from the 2007 House of Representatives Standing Committee on Transport and Regional Services report cited above, there is a need "*to raise Australia's rail transport to world's best practice*" and "*... that it is time that Australia made a national commitment to sharply raising the standard of the rail network to provide a fast, modern, flexible and efficient system.*"

As suggested at the hearing on 4 December 2009, in order to get real productivity gains in the movement of long distance freight, the interstate mainline tracks should be progressively upgraded towards United States-Canadian Class I railroad standards that allows freight trains with 30 tonne axle loads (TAL) with double stacked container capability to move up to 100 km per hour. Not just 23 TAL at up to 80 km/h (or 21 TAL at 115 km/h) that prevails over much of the ARTC network.

Straightening and strengthening mainline interstate track (for Fast Freight Trains with heavier axle loads) and/or improving clearances (overhead and sometimes width) will cost. However, the level of cost per kilometre will not be nearly as high as building dual carriageways (now over \$25m per kilometre where many rail deviations will be built for less than \$10m per km - as it happens some were built during the 1990s on the Queensland North Coast line for \$1.3m per km).

Potential rail deviations on the Melbourne-Sydney-Brisbane track can be divided into three sections:

June- Macarthur,

North Strathfield-Hexham,

and Hexham to the NSW-Queensland border.

Main South

Bethungra Spiral Bypass
 Cootamundra - Bowning
 Yass - Goulburn
 Penrose - Werai
 Mittagong Menangle (near Macarthur) (Wentworth)
 Werai to Penrose

North Strathfield-Hexham

Subject to studies and should include Fassifern - Hexham

Hexham to the NSW-Queensland border

Hexham - Stroud Road
 Johns River (north of Taree)
 Hexham - Stroud Road
 South and north of Kempsey
 South of Coffs Harbour
 South and north of Grafton

The five Main South deviations would require 196 km of new track and replace 256 km of 'steam-age' alignment. Benefits for each freight train with three 4000 HP locomotives include a time saving of 105 minutes and a fuel saving of about 2000 litres of diesel. Savings for Sydney Brisbane are yet to be quantified although the House of Representatives Standing Committee on Transport and Regional Services 2007 report cited above (page 116) notes shortening the 97 km Hexham - Stroud Road section to 67 km, with a time saving of 40 minutes and a fuel saving of about 630 litres of diesel.

To date, the ARTC has concentrated on asset renewal and maintaining track on the existing alignment. This reflects that fact that as a corporation, ARTC is required to make prudent investments rather than road authority type investments.

Deviations have been deferred although the ARTC 2008-2024 'Interstate and Hunter Valley Rail Infrastructure Strategy' notes (p32) that "*Deviations offer significant benefits in terms of reduced transit time and reduced distance.*" The Strategy provides for a total of 8 deviations on the North South corridor to be completed in 2014. However, more than 8 are needed including some long deviations.

Construction of rail deviations, without undue delay such has occurred on the South Sydney Freight Line one reason for the ARTC being reconstituted as an Authority with powers including the ability to acquire and or resume land.

4. High Speed Rail

The topic of high speed rail was raised at the hearing on 4 December 2009 by Committee members. Attention is drawn to a report released 13 January 2010 by the CRC for Rail Innovation ([http://www.railcrc.net.au/publications/downloads/R1.109 ...](http://www.railcrc.net.au/publications/downloads/R1.109...)) with an accompanying media release in part as follows. *TIME FOR HIGH SPEED RAIL*

“The time is right for a major concept study into High Speed Rail in Australia” concluded the Cooperative Research Centre (CRC) for Rail Innovation pre-feasibility report on HSR in the Australian context.

David George, CEO of the CRC for Rail Innovation said: “Factors such as constrained airport capacity, a rising and increasingly urbanised population, maturing technology and an increased focus on reducing transport emissions, indicate that HSR in Australia should now be seriously investigated”.

Average speeds between stations of around 250km/h are now in established operations in Europe. More recently even higher average speeds have been reported in China. Applying such speeds to Australia could reduce Sydney – Melbourne transit time to between 3 and 4 hours and lead to a very significant rail mode share.

From European experience it could reasonably be expected that some 50% of the travellers between Sydney and Melbourne would use a high speed rail link if the journey was less than four hours. For shorter routes such as Sydney – Canberra and Sydney – Newcastle the share of travellers would be much higher.

In particular, the CRC for Rail Innovation report strongly suggested that Sydney airport capacity issues should be considered in conjunction with future HSR options. An HSR could reduce Sydney – Melbourne/Canberra/Gold Coast/Brisbane air patronage and alleviate the need for a second Sydney airport. It could also potentially provide the option of using Canberra and Newcastle airports to increase Sydney’s airport capacity. Based on European experience an HSR would also ensure better overall environmental outcomes as a result as a result of reducing emissions from air and road traffic.

HSR projects have had a transformational and nation building impact on those countries investing in them, by linking cities more closely and acting as a catalyst for regional and national integration. Sydney and Melbourne for example are both world class cities with populations forecast to rise to over 5 million people. It is widely recognised that the air corridor between these two cities is ranked among the top five busiest air routes in the world. This makes it a promising HSR route to change how people travel between these two cities.

In summary the pre-feasibility report concluded that the time is right to carry out an in-depth concept study of High Speed Rail in Australia and that even if HSR doesn’t go ahead in the immediate future, there should be a move towards corridor preservation to reserve future options.