

CARGO-CULT RAILWAY PROPOSALS

Mega-railway projects defy economics, logic and reason, argues **John Nestor**

Mega-railway projects attract politicians. Some, such as the Alice Springs to Darwin link, get built. Others, such as a proposal floated in the late 1980s to build a high-speed passenger railway between Sydney and Melbourne, do not.¹ In that case, the absurdity of investing billions of dollars so people could do the trip in several hours more than the plane, but at higher cost per passenger journey, won out and the proposal died.

However, proposals for mega-railway schemes continue to recur. Recent proposals include a new east-west transcontinental railway across the tropics, a new railway connecting Melbourne and Brisbane, and the Maldon-Dombarton Railway through the southern Sydney Catchment Area.

The Department of Transport and Regional Studies released its *North-South Rail Corridor Report* (2006) (DOTARS Report) in September of last year. The Report examined a number of proposed routes for an inland (Melbourne-Brisbane) railway, and compared them with various large investments in the existing railway. The possibility of building another railway from Melbourne to Brisbane and the central Queensland coast, using and upgrading some sections of the various inland branch railways, was received enthusiastically in some circles. The National Party Federal Secretariat, for example, issued a news release headed 'Inland Railway a Route to Economic Prosperity'.² Though stressing that the railway would depend on commercial support, Prime Minister John Howard indicated in May 2007 that the government would help the project in an 'appropriate way'. A spokesman for the Transport Minister said that money had

been put aside for 'detailed planning and work on community consultation.'³

Railway proposals in this country often claim that railways lead to economic progress. Like many fallacies, there is a grain of truth in this idea: in the nineteenth century, the introduction of railways almost always led to significant economic progress in the areas they served. By the early twentieth century, this was more nuanced. In general, the later a rural railway was built in Australia, the more likely it was to close because it served little economic or social purpose.⁴

Investment in transport is widely regarded as being of particular importance in improving the Australian economy's competitive position, not to mention improving the quality of life. But building or improving railways involves huge costs which cannot be diverted to another purpose if not successful. We should therefore carefully analyse any proposals, especially since they virtually always involve large government subsidies which may

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Endnotes for this article can be found at www.policymagazine.com.

not all be immediately apparent. We should also be aware that vested interests may stand to make large gains if railways are built, even if they are in no way successful.

The reasons given for the proposed inland railway tend to vary in the telling, but chiefly seem to be two: it is claimed that the present railway route from Melbourne through Sydney to Brisbane is nearing saturation, with the proposed railway necessary by 2019 because the existing railway will by then be operating at capacity, and that the proposed inland railway would reduce freight travel times and so enable railways to gain more high-priority freight.

Melbourne-Brisbane rail capacity

While there are certain places in the Sydney metropolitan area, and between Sydney and Newcastle, where, if predictions as to total freight traffic and rail's share of it are realised, there will be capacity constraints, this is certainly not the case for the railway as a whole. For example, the existing timetable shows there to be only three Melbourne-Brisbane regular freight trains per day in each direction.⁵

Of course, there are trains moving between other points on this railway; but even the Marulan-Moss Vale section, the busiest non-CityRail part of the Melbourne-Brisbane line (except for the short Waratah-Maitland line, which has four tracks), currently operates at a fraction of its capacity. Such is the paucity of traffic that the double track from Junee in southern NSW to Goulburn, was proposed to have one track removed some years ago, though this has not been carried out. By the standards of single track American railroads, or those of north-western Australia, the present Melbourne-Brisbane line is barely used.

Let me hasten to add that there are sections of the present railway which will exceed optimal capacity, given traffic growth, in the near or more distant future. One of these is the southern entry into Sydney, where freight traffic has become constrained because CityRail has greatly increased its commuter trains. The Australian Railway Track Corporation (ARTC) will this year build a single-track 30 km line exclusively for its freight trains from Campbelltown to near the existing Chullora terminals. Suggestions have been made that the line between Sydney and Broadmeadow

(Newcastle) will need some augmentation in the future. But to claim that this suggests that a whole new Melbourne-Brisbane railway be built is like suggesting that road congestion at Chatswood means a new expressway should be built from Melbourne to Brisbane.

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Time savings

The DOTARS Report examines three possible inland railway routes; but each of these three is separately examined on the basis of routes via Shepparton and via Albury, so there are actually six possibilities. Also, the results are compared with a highly upgraded version of the present Melbourne-Brisbane via Sydney line.

Contrary to the enthusiasm for the proposed inland railway by its supporters, the report finds that the economic cost/benefit for every proposal examined, is negative.⁶ Of the proposals which significantly reduce the freight train travel times, the existing coastal route gives the lowest (that is, closest to zero) negative economic cost/benefit figure. The coastal route is estimated to give a freight travel time of 26 hours, at a cost of \$1.5 billion and with a negative economic cost/benefit of \$251 million. No consideration is given to lesser investments in the present line, but it would be expected that the economic cost/benefits for smaller investments would still be negative but closer to zero.⁷

Construction of the far western inland (via Albury) route is estimated to allow a freight travel time between Melbourne and Brisbane of 20.6 hours. Adding the report's estimate of six hours for truck pickup and delivery, it would allow rail to compete door-to-door with existing trucks for time-sensitive freight.⁸ At a cost of \$3.1 billion, this gives a negative economic cost/benefit of \$1.24 billion.

This is at first sight better than the \$10.2 billion required to achieve approximately the same time

result on the existing coastal route via Albury. But if the question is rephrased to ask, should a new railway route be added to existing lines, with the attendant higher continuing maintenance costs, to allow the rail sector to compete in an area where it has been losing market share for many decades, the economic cost/benefit answers an unequivocal 'no'. The report concedes 'The ability of rail to provide these services in the future appears limited even with planned transit time and reliability improvements.'⁹

It has been suggested that railways need vast investments to compete with trucks. Certainly, the percentage of all freight carried by rail is low: It has fallen to 9% between Melbourne and Sydney. The proposed inland railway would do nothing for transport between Australia's two largest cities; by doubling the Melbourne-Brisbane railway kilometres to be maintained (that is, the inland Railway and the present route) there would in fact be less money available for the existing route's maintenance and improvement. The proposed inland railway would be entirely single-track, which would mean throughout their journeys trains would have to stop and wait at passing sidings. Since the report lists lack of reliability as an important reason for lack of use of rail for priority freight,¹⁰ a single-track railway stretching through sparsely populated western NSW is unlikely to improve on-time performance. In fact, any attempt by rail to recapture priority freight, given the culture of the Australian rail infrastructure providers, seems fraught with difficulty.¹¹

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To this we could add that road transport would not cease to improve its service, especially if the rail sector were to threaten to take a significant amount of its lucrative time-sensitive freight. All in all, we should be extremely wary of investing large sums of public money (directly or via taxation concessions, and so on) into the expectation that the rail sector *can* achieve the predicted five hours travel reduction Melbourne-Brisbane, *and* by the

time it is finished, road improvements will not have reduced truck travel times, *and* that the level of truck door-to-door service and reliability, will not negate any remaining rail transit time advantage. The report is asking for a huge commitment in return for very contingent outcomes.

Multiple use infrastructure

On the other hand, incremental investments in the present coastal route (via Sydney), have a number of advantages not completely obvious from the report. Unlike the far western route, almost the entire coastal route is used for significant other traffic; any infrastructure improvements would benefit these other traffics. For example, infrastructure improvements between Sydney and Newcastle, under certain circumstances, could improve the large commuter and intercity passenger traffic, general freight and so on. Infrastructure improvements between Sydney and Goulburn would benefit commuter passenger traffic, freight and passenger traffic on the Sydney to Canberra and Sydney to Perth freight traffic routes. The report notes that '... a targeted investment of up to \$1.5 billion on the existing coastal route (beyond the current ARTC upgrade program) which would concentrate on relieving congestion in the area to the north of Sydney, could produce a better net present value than the \$1.5 billion option' [of the report].¹² Such improvements within say 200 kilometres of Sydney would almost certainly be made in conjunction with existing lines, so the report, which considers the effect on Sydney-Brisbane traffic only, understates the economic and social value of improvements, which would also benefit other freight traffic and especially commuter traffic.

All things being equal, it makes sense to concentrate all possible traffic on fewer routes so that these can be equipped with the best track, signaling and crossovers to facilitate the most expeditious movement of traffic. If traffic builds up sufficiently, double track might be justified; double track is far more efficient than two different routes of single track because to the extent that trains move at about the same average speed (which on modern railways is closer to the case than in the past), there will be none of the delays that are inevitable on single track railways, like the proposed inland railway. On a single track railway with any

given level of investment, the more successful it is in attracting extra traffic, the slower will be the average train speed. This is because each additional train places a time burden on every train travelling concurrently in the opposite direction, no matter how much excess capacity the line has available.

There are a large number of small possible deviations which could improve freight (and passenger) travel times on the existing Melbourne-Sydney-Brisbane Route, and it would be interesting to have economic assessments of them.

Impact on rural centres

There is generally a great deal of enthusiasm in rural centres about the possibility of the inland railway going through their town. In times long past, the railway coming to town meant hundreds of jobs as track maintainers, train operating staff and the large range of trades necessary to keep steam locomotives in service. Their wages expanded the local economy considerably. While there might be some local jobs in construction or reconstruction in connection with the inland railway, there is unlikely to be much effect on local economies at all, once the railway opens. Modern railways operate from metropolitan cities and a very few other large centres; permanent track workers are very few and periodic maintenance workers move around the state. Even operating staff work over very long sections and sometimes remain on the train in a crew sleeping car. Rural residents expecting a bonanza from the proposed inland railway should view Tarcoola, South Australia as a cautionary tale: once a town of over a thousand, its present population is one family; its school, swimming centre, police station and hotel all closed; yet it is located at the most important strategic railway junction in Australia, where the Adelaide-Darwin line junctions from the Sydney-Perth line.¹³

The Maldon-Dombarton railway

Another railway proposal which seems impossible to decently bury is the Maldon-Dombarton Railway, running south-east from the outer Sydney area to near Port Kembla. Some construction was carried out a generation ago before there was a change in government and the truth dawned on someone in authority that it would serve no useful purpose. However, further development at Port Kembla has it back in the news.

A railway from the main Southern Line to Port Kembla makes a lot of sense; so much, in fact, that one was built in 1932. It connects Port Kembla directly with Moss Vale, where the main Southern line runs to Maldon and other points. The proposal is to build a second railway which is somewhat shorter, but considerably steeper against loaded trains (2% grade for the proposed line, 1.33% on the existing line). Since the line would be used almost entirely for heavy bulk goods like coal, replacing a longer, easy-graded railway by a somewhat shorter steeper one, goes against all logic in railway economics. The proposed railway is also single track (about half the present one from Maldon through Moss Vale to Port Kembla is double track). Add to this the detail that the proposed railway goes centrally through the Sydney catchment area, and that the present railway would need to be kept open for other traffic anyway, and you have a scenario that defies logic. There have even been suggestions that the proposed Maldon-Dombarton Railway would serve a social purpose as a passenger train route between Wollongong and Campbelltown. However the journey time, via the circuitous, single track line would be several times longer than the present bus route.

Again, the existing railway is operating at well below capacity. If traffic builds up, incremental investments like duplicating sections of remaining single track would improve operating efficiency beyond that attainable on two separate single-track routes

Conclusion

But of course defying logic has never stopped extravagant and needless railway projects in the past. Part of the problem is undoubtedly that vested interests follow narrow expectations of personal or corporate gain at the expense of taxpayers. People make decisions based on incorrect knowledge; and with the sums involved, spreading disinformation may well be profitable for those who expect to gain. But it seems too that there is something hidden in the collective and personal psyche of many people: A sort of cargo cult vision of the railway bringing prosperity and betterment to town and village. Against this, what chance has mere economics, logic or reason?

Endnotes:

¹ John Nestor, 'Taken for a Ride on the VFT', *Policy Report* 4:6 (December/January 1988–89), pp 12–15.

² The Nationals, 'Inland Railway a Route to Economic Prosperity', 7 September 2006, www.nationals.org.au/news/default.asp?action=article&ID=1880.

³ 'Government denies roads money is a slush fund', *Sydney Morning Herald* online, 10 May 2007.

⁴ Examples of rural railways in New South Wales built after 1900, which had a short and unsuccessful life, included the Roslyn-Taralga, Gulgong-Gwabegar and Booyong-Ballina lines, but other examples abound.

⁵ See Australian Rail Track Corporation, *Timetable Version 1 Effective 28th May, 2006*, pp S1–S106 available on the Corporation's website, www.artc.com.au/nsw/toc-manual.htm.

⁶ The full tabulation appears in Chapter 7 of the DOTARS (Department of Transport and Regional Services), *North-South Rail Corridor Study 2006* (Canberra: DOTARS, 2006). It is also noted that 'The results on a Net Present Value basis are negative for all rail options': DOTARS, *Background Briefing—10 Key Points About the North-South Railway Corridor Study* (Canberra: DOTARS, 2006), p 3, available at www.auslink.gov.au/publications/reports/north_south_corridor.aspx.

⁷ The Report considers three investment scenarios on eight possible Melbourne-Brisbane rail routes (including the existing one). These are, to invest \$1.5 billion on each route, \$3 billion on each route, and an unconstrained amount necessary to get the minimum practical freight train travel time. For this reason, there is no direct comparison possible with, say, spending nothing on the present route, or less than \$1.5 billion. See DOTARS, *Background Briefing*.

⁸ Notice that the Report seems to assume a static world outside the rail industry, where road improvements do not allow quicker truck transport than exists at present. Also, there seems no consideration of the strategic reaction of truck operators facing a new rail service threatening to take their high-value time sensitive freight. Both assumptions seem unrealistic.

⁹ DOTARS, *North-South Rail Corridor Study 2006*, ch 3, pp 3–16. The Report is referring directly to the express freight sector, but the same is likely to apply to most time-sensitive freight.

¹⁰ See DOTARS, *Background Briefing*, p 1.

¹¹ In general, investments in existing railways in Australia have not led to faster trains. To take just one example, the fastest passenger trains between Sydney and Newcastle now take longer than they did before the Second World War, in spite of gigantic investments in the route's infrastructure and trains. See *Australian Railway Historical Society Bulletin* XX(new series):385 (November 1969), p 257, which shows that the fastest passenger trains between Sydney and Newcastle in 1940 took 2 hrs and 20 mins; the present timetable, available at www.cityrail.gov.au.info/timetable, shows that no existing services are even close to this time.

¹² See DOTARS, *North-South Rail Corridor Study 2006*, ch 8, pp 8–7.

¹³ Telephone conversation with the proprietor of the Kingoonya Hotel, SA, 10 February 2007. I had tried to contact the proprietor of the Tarcoola Hotel, where I stayed some years ago, but my informant confirmed that the hotel—the last public service in Tarcoola—had closed some years ago, shortly after the opening of the new railway from Tarcoola to Alice Springs.