

Slow to arrive, but will Australian high speed rail be worth the wait?

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Credit: AI-generated image (disclaimer)

East coast Australian cities could one day be linked by high speed rail, but with a price tag of \$114 billion and a 40 year timeframe, according to a study released by the Transport Minister Anthony Albanese.

Under the <u>plan</u> announced today, the 1,748 kilometre network –



including 144 kilometres of tunnels – will be completed in stages, linking Brisbane, Sydney, Canberra and Melbourne.

The Sydney to Canberra section would be completed in 2035. The last stage, linking the Gold Coast and Newcastle, will be finished in 2058.

The analysis is the second phase of a strategic plan announced in 2010.

The government says despite the large <u>price tag</u>, <u>high speed rail</u> is viable, estimating the network will attract 40% of intercity air passengers by 2065, with 83.6 million passengers expected per year.

We put it to the experts: it's a long time to wait, and it will cost a lot. Is high speed rail worth it?

Matthew Burke, Senior Research Fellow, Griffith University

The report estimates between 40-60% aviation passengers will transfer to rail. I'm not entirely sure that's achievable.

If you're in Coffs Harbour trying to get to Sydney, high speed rail makes sense. A travel time between Sydney and Canberra of an hour down from four makes that a very competitive service.

In a world where <u>oil reserves</u> are constrained, aviation gas may become much more expensive and there may be differences between relative costs. Under those scenarios high speed rail might stack up.

It would make sense to agree and preserve a corridor and plan for a future system but to commence construction only when it's financially viable.



Should we be doing high speed rail at this point in time with <u>Australian cities</u> the size they are? On a world scale they're pretty small, the distances between them a very large, and the cost to link them up is enormous.

At the very lowest the cost of high speed rail between Newcastle and Brisbane could be \$20 billion, and as high as \$40 billion. For \$20 billion you could give Brisbane its cross river rail project. You could give the Sunshine Coast its first ever fixed public transport network. You can quadruple the size of the light rail on the Gold coast, and you could still have \$10-30 billion left over.

A significant portion of the use that's projected is for daily commuters who would come from 'lifestyle' cities on the outskirts of Sydney and Melbourne travelling to the major centres. These would become the most subsidized commuters in the history of Australian urban settlement. And I'm not sure you could call that travel sustainable even if it's by rail.

Rico Merkert, Senior Lecturer in Aviation Management, University of Sydney Business School

This is not a new phenomenon. We have seen huge programs in Western Europe: in Spain, France, Germany, even the UK now has a high speed train program connecting London with the North of England. Japan, China and Taiwan do too. At some point we will see high speed trains in Australia. It's just a question of how soon and at what cost.

It does require informed debate given the large cost and huge up-front investment.

The money could always be spent elsewhere. It would, however, at least in my view, be money well spent, with benefits of \$2.30 per \$1 spent.



Many people will argue that these estimates are optimistic. Construction costs are likely to go up, but still it will still be sensible to look into this more seriously.

There will be quite a lot of demand, particularly on the east coast with Brisbane, Sydney, and Canberra. Sydney to Melbourne is currently the fifth busiest airline route in the world. Brisbane to Sydney is not far behind. There's quite a lot of potential here as a high speed train could get you from Sydney CBD to Melbourne CBD in under three hours. That's quite an interesting proposition for a lot of business travellers.

It will be an alternative to airlines. It won't replace air traffic, because it's still a lot faster to travel via air. But some travellers based right in the city centre next to the train station might find the offer attractive. In terms of service levels they're similar to a flight. If the government is not prepared to subsidise these train operations then the prices for these train trips will be slightly higher than those on a [air] carrier (most certainly if it is a low cost carrier, such as Jetstar).

Peter Newman, Professor of Sustainability, Curtin University

The high speed rail system in Japan was started after the first oil crisis. We're now up to the fourth or fifth. The European system has developed along those lines as well. You cannot continue to see a future where more and more oil is used. Some countries have made a serious effort to get off it.

I welcome any studies about getting people out of cars and planes and making a more sustainable transport system. If it's electric it's potentially much easier to link into the renewable energy system. We've got to get off oil especially diesel.



We've got to be serious about this, and I wonder how serious it is to propose a project that will cost \$114 billion.

I've been looking at rail construction costs the past few years and getting more and more angry at how they have ballooned, which is due to unnecessary risk management.

This proposal seems to be beyond any realistic cost to build. Yet we built the southern railway in Perth for \$17 million per kilometer. It had tunnels and bridges, overpasses and is essentially high speed rail at 130 kilometre per hour. I understand the high quality track requirements but these numbers seem too high to me.

Phillip Toner, Honorary Senior Research Fellow, University of Sydney

Everyone is in favour of more public transport. But there are a lot of other cheaper, intermediate options. Things like tilt trains that travel quite fast, they require relatively minor modifications to existing rail networks. These trains could cut travel time between urban centres by half.

Even in terms of transport, there a plenty of really high priority options such as improving the freight rail network between Melbourne and Brisbane, and Melbourne to Perth. That's an absolute priority to get trucks off the road and significantly reduce pollution.

Something would have to happen with air traffic too. While you can get return airfares from Sydney to Melbourne for \$100 that is a cheap option. Pollution generated by air traffic is a major problem now, but in the future they could be running on renewable energy. By the time they start working on fast train there will probably be developments in



renewable energy such as the introduction of algae-based biofuel.

I can't help think that the whole thing is to make the government look visionary and nation building. It's hard to see the case for it considering cheaper options. You've just got to consider what else you can do with that sort money, such as investment in Gonski, higher education and the Australian science and technology base.

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