# Higher speed rail – why Newcastle is the better bet

Some recent media articles included a welcome development in the debate about high speed rail in Australia, arguing that instead of the big-bang start of superfast trains between Sydney and Canberra, a better approach would be to concentrate on higher speed trains between capital cities and major centres; such between Sydney and Wollongong or Newcastle.[[1]](#endnote-1)

Among reasons given were land development opportunities, which reportedly attracted the attention of Asian investors and could offer a source of finance for transport projects.

The offered project was Sydney-Wollongong, with a transit time less than an hour. Via south western Sydney, Macarthur (Maldon near Picton)!

I think this proposal is misguided. The obvious problem arising, much like that of the recent high speed rail studies, is that *if* it is a straw man it will distract attention from and delay better ideas.

Less obvious are problems of transport planning which the proposal would expose.

## The proposal compared with Newcastle

While there is merit in seeking a one hour commuting time between Sydney and Wollongong, there is likely to be more merit in doing so for Newcastle.

The relevant location in Sydney should be the ‘global arc’; places along a line between Kingsford Smith Airport in the south to Ryde in the north-west, including the CBD and North Sydney. The arc is an area of high and high value employment growth.

Table 1 provides a comparison, excluding cost of Wollongong (Macarthur) and Newcastle (Central Coast) higher speed rail.

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| **Element** | **Wollongong, Illawarra** | **Maldon, Macarthur** | **Newcastle, Hunter** | **Gosford, Central Coast** |
| Population | 300,000 | 160,000 | 550,000 | 330,000 |
| Distance to global arc  . direct  . proposal | 80km  125km + | 75km  75km | 140km  110km | 65km  65km |
| Current transit time to global arc | 1 hour | 1 hour | 1.75 hours | 1 hour |
| Gateway for | South Coast NSW | Southern Highlands | Northern NSW |  |
| % of proposed route usable for intercapital high speed rail | 50% | 100% | 100% | 100% |

Table 1 indicates Newcastle is a better fit for higher speed rail than Wollongong. Compared with Wollongong, Newcastle: would benefit more from target transit times; has a higher local population; is a gateway for a far larger regional catchment; would be on a future intercapital high speed route.

Costs for Newcastle are likely to be higher, but this effect would be mitigated by planning aspects outlined below.

## Sydney transport planning issues relevant to Wollongong proposal

Current travel times over the direct 80km distance between Wollongong and the global arc (Kingsford Smith Airport) are around an hour for road and rail. Only a rail solution would reduce this substantially.

Extending the existing southern motorway through suburbs into Sydney city would likely induce traffic, negating initial travel time benefits and possibly increasing congestion in Sydney’s worst traffic areas. The effect would be faster if road pricing is not introduced.

A rail solution was in the offing. The current railway suffers from slow speeds due to a substantial winding segment close to sea cliffs. It is subject to land slips; part of the adjacent road fell into the sea some years ago and was replaced by the sea cliff bridge. A new rail alignment was mooted by the NSW government in 1998; a 12 km tunnel which would cut travel times.[[2]](#endnote-2)

Routing trains indirectly to Wollongong via south west Sydney would avoid the cliffs but is over 45km longer passing through at least 25km more of Sydney’s suburbs. A one hour transit time would need substantial tunnelling in the 55km between Central and Macarthur.

In theory such an indirect route to Wollongong could use a rail alignment started, but abandoned, in the 1980s; Maldon-Dombarton.[[3]](#endnote-3)

In practice this alignment will need to be completed in any event for freight trains. Among the reasons: one current plan is for Sydney metro to cannibalise inner south Sydney tracks used by freight trains running to Port Kembla. [[4]](#endnote-4)

Under such a plan Port Kembla could be stranded unless the Maldon alignment is completed. Stranding is a critical problem for Sydney as Port Kembla probably will be needed to complement the container port at Botany; Kembla is arguably in a better position than Botany to deal with container growth in the longer term eg. better road and rail access to industrial lands in south western Sydney.

In addition to the Port Kembla issue, the cost of high speed, or even higher speed, rail between Sydney and Wollongong would increase substantially if the metro cannibalises inner south Sydney tracks; more inner Sydney tunnelling will be required.

While promotion is considered to be the current order of the day for the Sydney metro, consequences, such as indicated above, will eventually surface. Showcasing of project management cannot hide strategic flaws in transport planning or policy forever. If there are mistakes in planning lets hope they are few and minor.

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1. http://www.illawarramercury.com.au/story/4000897/big-investors-in-race-to-build-wollongong-fast-train/?cs=4110 [↑](#endnote-ref-1)
2. http://infrastructureaustralia.gov.au/policy-publications/submissions/published/files/95\_smasuniversityofwollongong\_SUB.pdf [↑](#endnote-ref-2)
3. http://www.transport.nsw.gov.au/projects-completed-projects/maldon-dombarton-rail-link [↑](#endnote-ref-3)
4. http://www.smh.com.au/nsw/plan-to-extend-sydney-metro-line-south-hits-growing-list-of-hurdles-20160201-gmj9dz.html [↑](#endnote-ref-4)