

# High Speed Rail in Australia



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# Why now?

There is a renewed focus on High Speed Rail (HSR) in Australia. The recently established High Speed Rail Authority has been tasked with “advising on, planning, developing and overseeing the construction and operation of a transformational network along Australia’s eastern seaboard”, with an initial focus on the Sydney to Newcastle<sup>1</sup> section of the network.

**The following drivers may provide the shift needed to make HSR a reality:**



**Housing affordability challenges**



**Increased population shift to the regions**



**Flexible work patterns**

# Benefits

The construction of a HSR network along Australia's eastern seaboard provides a unique opportunity to enhance liveability, wellbeing, and shape the future productivity of our regions.



# Benefits

**Accessibility:** HSR would significantly improve accessibility and the capacity of the transport network along the east coast, and provide a competitive alternative to air travel. A journey between Newcastle and Sydney could be around 39 mins by HSR. Total interstate travel times would be comparable to air travel, with a journey between Sydney to Melbourne estimated at around 164 minutes<sup>2</sup>.

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**Liveability and affordability:** Housing has never been more unaffordable, with rising property prices and rental growth crippling the nation. HSR has the potential to shape growth and development and provide more affordable housing opportunities. In the UK, for example, average property prices in Kent, which is within the catchment area of HS1 and around a 38-minute<sup>3</sup> HSR journey to London, are almost half that of properties in the wider commuter catchment area to the southeast of London<sup>4</sup>.

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**Economic development:** HSR will enhance economic growth and productivity. An investigation of the economic impact of HS1 estimated that the network provides direct benefits of \$427m per annum (including travel time savings, productivity improvements and environmental benefits). In total, an estimated £4.5bn worth of benefits have been delivered in the sixteen years since the first section of HS1 opened<sup>5</sup>.

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**Regional development:** HSR would have a significant impact on key regional centres by improving accessibility and delivering significant benefits to the economy, wellbeing, liveability, sustainability, community and place.

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**Greener future:** Australia is committed to achieving net zero emissions by 2050. Providing an attractive transport alternative to car and air travel will help to achieve this commitment. For example, it is estimated that around 4 million of 15% of HS1 journeys have switched from using cars and planes, delivering significant environmental benefits including a reduction in greenhouse gas emissions.

# Challenges

Multiple investigations into the development and delivery of a High Speed Rail network in Australia have occurred, dating back to the early 1980s. The delay in real progress highlights the immense challenges that need to be overcome.



# Challenges

**Capital investment:** The most recent investigation in to High Speed Rail along the east coast of Australia estimated a total capital cost of \$114.0 billion in 2012, which is equivalent to at least \$153 billion in today's dollars.<sup>6</sup>

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**Fare structures:** Fares are likely to be comparable with air travel, which makes sense for intercity and longer journeys, however it is likely to represent a significant increase for commuter journeys such as between Sydney and Newcastle. Whilst the existing train travel time is long, around 2.5 hours, fares are heavily subsidised and only \$9.31<sup>7</sup>.

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**Optimal staging:** The total time required to deliver a HRS network along the east coast, from planning through to delivery is likely to take around 45 years.<sup>8</sup> Optimal staging will deliver early benefits and maintain momentum throughout the construction phase.

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**Construction:** There are significant risks and challenges associated with the construction of the network, including the need for extensive tunnelling through already built-up areas (particularly within Sydney), risk of cost blowouts, environmental and heritage impacts, and the need to attract the right capabilities, experience and workforce.

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**Competing investments:** Major competing infrastructure investments, such as Western Sydney International (Nancy-Bird Walton) Airport, are likely to increase competition and impact demand for HSR.

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**Network integration:** There is a need to think beyond just the HSR network, and consider how will it integrate with existing mass public transport networks in key locations and identify opportunities for mega station developments.

# Key actions

There are a range of key actions that need to happen now to ensure the success of any future planning and investment in HSR in Australia.



# Key actions

**Corridor protection:** If Government is committed to High-Speed Rail along the east coast, corridor protection should occur as a priority to minimise any ongoing constructability and affordability impacts associated with urban sprawl.

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**Customer value proposition:** The success of the network will depend on attracting customers. HSR needs to present a high-quality, fast, frequent, well-connected and reliable alternative to road and air travel. We need to develop a network and services that consistently delivers what customers want.

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**Regional development strategy and planning:** HSR will provide a catalyst for growth at key regional locations along the route. Upfront planning for growth, development and placemaking, along with working closely with local government, industry and communities across the east coast, will be required to maximize local opportunities and community support for the project.

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**Upskilling the future workforce:** Construction of the network will create significant job opportunities. We need to identify the skill sets required to construct the network and begin investing in skills attraction and development now.

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**Funding and financing:** Innovative funding and financing approaches will be necessary to support the significant capital investment requirements. Market engagement should begin now to help understand potential solutions that would incentivise private sector financing. Options could include station development, value capture and network ownership.



# About the author

Malinda is an infrastructure specialist with over 15 years' experience, having provided strategic and policy advice across all levels of government.

Malinda has led a wide range of strategic projects including the development of the Fast Rail Regional Development Framework for Transport for NSW and supporting the Greater Cities Commission to develop the Western Sydney Place-based Infrastructure Compact. Malinda is interested in exploring the feasibility of HSR in Australia and its potential to drive transformative growth and development along the corridor.



Malinda Parkinson, Director  
malinda@hadrongroup.com.au  
0400 491 521

## Footnotes:

1. Source: <https://www.hsra.gov.au/>
2. Source: 2012 High Speed Rail Phase 2 Feasibility Study
3. Travel time between Ashford International and London St Pancras; Source Southeastern Railway <https://www.southeasternrailway.co.uk/journey/ashford-international-to-london-st-pancras>
4. Source: <https://highspeed1.co.uk/media/vemkxmot/delivering-for-britain-and-beyond-the-economic-impact-of-hs1-march-2020.pdf>
5. Source: <https://highspeed1.co.uk/media/vemkxmot/delivering-for-britain-and-beyond-the-economic-impact-of-hs1-march-2020.pdf>
6. Assuming a 2.5% annual inflation rate
7. Assuming an adult opal fare, source: <https://transportnsw.info/tickets-opal/opal/fares-payments/adult-fares>
8. Assumes 5 years for planning and approvals, 10 years for preconstruction and procurement and 30 years for construction based on the timelines outlined in the 2012 High Speed Rail Phase 2 Feasibility Study.