CHAPTER 02

Strategic Context

NORTH STAR TO NSW/QUEENSLAND BORDER ENVIRONMENTAL IMPACT STATEMENT

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

Contents

2. STRATEGIC CONTEXT 2-1

2.1 Strategic planning context 2-1

2.1.1 The existing situation 2-1
2.1.2 Consistency with Commonwealth, State and regional strategic planning 2-3

2.2 Summary of key issues and demands 2-6

2.2.1 Growth in freight demand 2-6
2.2.2 Existing freight capacity and infrastructure issues 2-6
2.2.3 Assessment of demands for Inland Rail 2-7

2.3 Need for the proposal 2-7

2.3.1 Need for Inland Rail 2-7
2.3.2 Need for the proposal 2-8

Figures

Figure 2.1 Proposed alignment for Inland Rail 2-2

Tables

Table 2.1 Inland Rail projects ARTC has commenced planning and design work For 2-3
Table 2.2 Consistency of the proposal with national, state and regional strategic planning 2-4

2. Strategic Context

2.1 Strategic planning context

2.1.1 The existing situation

This chapter assesses the strategic planning context of the North Star to NSW/Queensland Border project (the proposal).

At present, there is no continuous inland rail link between Melbourne and Brisbane. Interstate rail freight travels between Melbourne and Sydney via Albury, and between Sydney and Brisbane, generally along the coast. About 70 per cent of freight between Melbourne and Brisbane is via road, mainly via the Newell Highway in New South Wales (NSW) and connecting highways in Victoria and Queensland (Transport for NSW (TfNSW), 2015).

The idea for providing an inland railway between Melbourne and Brisbane has existed for at least 100 years (Inland Rail Implementation Group, 2015). Since 2006, the concept of establishing an inland railway between Melbourne and Brisbane has been the subject of significant analysis for the following reasons (Australian Rail Track Corporation (ARTC), 2015):

- The existing north–south coastal railway will reach capacity in the medium term. Additional capacity is required to accommodate increasing demand for interstate and regional rail freight in the future.
- The quality of service provided by the existing coastal route is adversely impacting on freight productivity and transport costs
- The existing north–south coastal railway is trafficked by passenger and freight trains. This is impacting the reliability of rail freight and is constraining opportunities for the expansion of passenger services.
- In the absence of a continuous inland rail link between Melbourne and Brisbane, transporting freight by road has a competitive advantage over rail, making it difficult for rail freight to increase its market share
- Transporting freight by road has associated safety, congestion and environmental risks.

Since 2006, two major studies have been commissioned regarding the development of an inland rail route between Melbourne and Brisbane. The first study, the *North–South Rail Corridor Study* (Department of Transport and Regional Services, 2006) examined potential inland rail routes. The preferred inland rail route between Melbourne and Brisbane was the 'far-western sub-corridor' route via Parkes, Moree and Toowoomba.

In 2008, the then Australian Minister for Infrastructure, Transport, Regional Development and Local Government announced a second study, the *Melbourne–Brisbane Inland Rail Alignment Study* (ARTC, 2010). The purpose of this study was to optimise the far-western sub-corridor route and analyse the likely economic and commercial benefits of an inland rail route between Melbourne and Brisbane.

The *Melbourne–Brisbane Inland Rail Alignment Study* (ARTC, 2010) resulted in the current alignment for Inland Rail (Figure 2.1).

FIGURE 2.1 PROPOSED ALIGNMENT FOR INLAND RAIL

The high-level findings of the *Melbourne–Brisbane Inland Rail Alignment Study* (ARTC, 2010) were:

- There is demand for an inland rail route between Melbourne and Brisbane
- The Inland Rail route would be more than 100 km shorter than the existing coastal route
- The preferred route could achieve an average transit time from Melbourne to Brisbane of less than 24 hours. This is about 3.5 hours faster than the existing transit time of 27 hours and 30 minutes on the coastal route.
- An Inland Rail route would free up rail and road capacity through Sydney
- The preferred route would achieve a positive economic net present value between 2030 and 2035. If freight demand increases faster than the forecast rate, a positive net present value could be achieved sooner.

In November 2013, the then Australian Minister for Infrastructure and Regional Development announced $300 million in funding for Inland Rail to be used for pre-construction activities, such as detailed corridor planning, environmental assessment, and community consultation. The Minister also announced that a high-level implementation group would be formed to drive Inland Rail. The alignment for Inland Rail (Figure 2.1), identified within the *Melbourne–Brisbane Inland Rail Alignment Study* (ARTC, 2010), was endorsed by the Implementation Group as the base case alignment.

In 2014, the Implementation Group tasked ARTC with developing a business case and a 10-year delivery plan for Inland Rail. Since then, ARTC has commenced planning and design work for the 13 Inland Rail projects (Table 2.1).

TABLE 2.1 INLAND RAIL PROJECTS ARTC HAS COMMENCED PLANNING AND DESIGN WORK FOR

Project	Location	Project phase
Tottenham to Albury	Victoria	Feasibility
Albury to Illabo	New South Wales	Feasibility
Illabo to Stockinbingal	New South Wales	Feasibility
Stockinbingal to Parkes	New South Wales	Feasibility
Parkes to Narromine	New South Wales	Construction
Narromine to Narrabri	New South Wales	Feasibility
Narrabri to North Star	New South Wales	Assessment
North Star to NSW/Queensland Border (this proposal)	**New South Wales**	**Feasibility**
NSW/QLD Border to Gowrie	Queensland	Feasibility
Gowrie to Helidon	Queensland	Feasibility
Helidon to Calvert	Queensland	Feasibility
Calvert to Kagaru	Queensland	Feasibility
Kagaru to Acacia Ridge and Bromelton	Queensland	Feasibility

2.1.2 Consistency with Commonwealth, state and regional strategic planning

The vision, objectives and development of the North Star to NSW/Queensland Border project of Inland Rail (the proposal), as part of the wider Inland Rail program, are consistent with the national, state, regional and local strategies outlined in Table 2.2. The consistency of the proposal with these strategies is further described in Appendix C: Consistency with Relevant Planning Strategies.

TABLE 2.2 CONSISTENCY OF THE PROPOSAL WITH NATIONAL, STATE AND REGIONAL STRATEGIC PLANNING

	Consistency with Inland Rail program objectives					
Strategic planning framework	**Provide a backbone rail link between Melbourne and Brisbane that is interoperable with train operations between Perth and Adelaide to serve future rail freight demand and stimulate freight growth for inter-capital and regional/bulk rail freight**	**Provide an increase in productivity that will benefit consumers through lower freight transport costs**	**Provide a step-change improvement in rail service quality in the Melbourne to Brisbane corridor to deliver a freight rail service on the east coast that is competitive with road**	**Improve road safety, ease congestion and reduce environmental impacts by moving freight from road to rail**	**Bypass bottlenecks on congested metropolitan rail networks on the east coast, and free up train paths for other services on the coastal route**	**Act as an enabler for regional economic development along the Inland Rail corridor**
National						
Australian Infrastructure Plan: Priorities and reforms for our nation's future (Infrastructure Australia, 2016)	✓	✓	✓		✓	✓
State of Australian Cities 2014–2015 (Department of Infrastructure and Regional Development, 2015)			✓	✓	✓	
Urban Transport Strategy (Infrastructure Australia, 2013)				✓	✓	
National Freight and Supply Chain Strategy and National Freight and Supply Chain Action Plan (Transport and Infrastructure Council, 2019)	✓	✓	✓	✓	✓	✓
National Ports Strategy (Infrastructure Australia, 2011)		✓				
Newell Highway Corridor Strategy, (Department of Infrastructure Transport, Cities and Regional Development, 2019)				✓		✓
State						
State Priorities: NSW Making it Happen, Announced by the NSW Premier (New South Wales Government, 2015)		✓		✓		✓
Newell Highway Corridor Strategy (Transport for NSW, 2015)				✓		
State Infrastructure Strategy 2018–2038 (NSW Government, 2018a)		✓		✓	✓	✓

Strategic planning framework	Consistency with Inland Rail program objectives					
	Provide a backbone rail link between Melbourne and Brisbane that is interoperable with train operations between Perth and Adelaide to serve future rail freight demand and stimulate freight growth for inter-capital and regional/bulk rail freight	Provide an increase in productivity that will benefit consumers through lower freight transport costs	Provide a step-change improvement in rail service quality in the Melbourne to Brisbane corridor to deliver a freight rail service on the east coast that is competitive with road	Improve road safety, ease congestion and reduce environmental impacts by moving freight from road to rail	Bypass bottlenecks on congested metropolitan rail networks on the east coast, and free up train paths for other services on the coastal route	Act as an enabler for regional economic development along the Inland Rail corridor
NSW Freight and Ports Plan 2018–2023 (NSW Government, 2018b)	✓	✓	✓	✓	✓	✓
NSW Road Safety Strategy 2012–2021 (TfNSW, 2012)				✓		
NSW Future Transport Strategy 2056 (TfNSW, 2018a)				✓		✓
Regional and local						
NSW Central West Freight Study (Regional Development Australia Central West, 2014)	✓			✓		✓
Regional NSW Service and Infrastructure Plan (TfNSW, 2018b)						✓
Economic Development Strategy for Regional NSW (Department of Trade and Investment, 2015)	✓					✓
Upper North West Regional Economic Development Strategy 2018–2022 (Department of Premier and Cabinet, 2018)		✓				✓
New England North West Regional Plan 2036 (Department of Planning and Environment, 2017)	✓	✓				✓
Strategic Regional Land Use Plan New England North West (Department of Planning and Infrastructure, 2012)		✓				✓
Moree Plains 2035 Community Strategic Plan (Moree Plains Shire Council, 2013)		✓		✓		✓
Gwydir Shire Council Community Strategic Plan 2017–2027 (Gwydir Shire Council, 2017)						✓

2.2 Summary of key issues and demands

A summary of key issues and demands relevant to the proposal, as part of the wider Inland Rail network, is provided below. A detailed analysis of these issues and drivers is provided in the *Inland Rail Programme Business Case* (ARTC, 2015) and in the *Inland Rail Implementation Group: Report to the Australian Government* (Inland Rail Implementation Group, 2015).

2.2.1 Growth in freight demand

In 2011, the Australian domestic rail freight task totalled 261.4 billion tonne kilometres, accounting for approximately 46 per cent of total domestic freight. This represents an increase of 91 per cent since 2000–2001 (Infrastructure Australia, 2015).

The *Australian Infrastructure Audit* (Infrastructure Australia, 2015) notes:

- The national land freight task is expected to grow by 80 per cent between 2011 and 2031
- Demand for freight rail infrastructure is expected to grow, particularly for resource bulk commodity haulage, in Western Australia, Queensland and NSW
- Freight rail will need to play a growing role in the movement of goods between ports and inland rail freight terminals, and in the movement of containerised and general freight over longer distances.

The Melbourne to Brisbane corridor is one of the most important general freight routes in Australia, supporting key population and employment precincts along the east coast and inland NSW. The current volume of non-bulk and complementary freight moving within the corridor is approximately 21 million tonnes per annum. This is expected to increase to 40 million tonnes per annum by 2050 (Infrastructure Australia, 2016).

The eastern states of Australia comprise 18 million residents (79 per cent of Australia's population), nine million jobs (78 per cent of Australia's national employment) and contribute $1.1 trillion in gross state product (75 per cent of gross domestic product). Interstate freight transport is projected to increase by 70 per cent, between 2015 and 2030, to 140 billion tonne kilometres. The Melbourne to Brisbane corridor already supports 17 per cent of interstate movements (ARTC, 2015).

With the population of eastern states forecast to increase by 60 per cent over the next 40 years, the need for efficient and effective freight transport will continue to increase. Strong forecast population growth, accompanied by comparable employment growth, is likely to place significant pressure on existing infrastructure and services (ARTC, 2015). Without the increased use of rail, growth in freight demand is likely to increase pressure on the road network, resulting in increased freight costs and lost economic opportunities.

2.2.2 Existing freight capacity and infrastructure issues

As demand for regional and interstate freight transport grows, rail and road infrastructure in the north–south corridor will face progressive challenges in meeting future demand. There will be increasing pressure on freight capacity between capital cities, and from the regions, to export ports and urban freight destinations.

Freight trains travelling along the Melbourne to Brisbane corridor currently travel through the Sydney metropolitan rail network, often experiencing significant delays. Travel time reliability is poor due the priority given to passenger services, freight transit curfews in the Sydney metropolitan area, and substandard rail alignments elsewhere. Furthermore, limited capacity during morning and afternoon passenger peaks restricts freight movements at these times (TfNSW, 2013).

The *Australian Infrastructure Plan* (Infrastructure Australia, 2016) notes that the existing north–south rail corridor between Melbourne and Brisbane does not provide a service offering that is competitive with road transport. This is largely the result of 19th century alignments leading to low travel speeds, reliability and major bottlenecks, most notably in the Sydney metropolitan area.

Infrastructure Australia (2016) notes that the demand for urban transport infrastructure is projected to increase significantly. Without action, the cost to the wider community of congestion on urban roads could rise to more than $50 billion each year by 2031. Demand for many key urban road and rail corridors is projected to significantly exceed current capacity by 2031.

The *National Land Freight Strategy* (Standing Council on Transport and Infrastructure, 2013) identifies several existing challenges facing road and rail freight in general, including:

- Congestion from increasing numbers of passenger vehicles, and the priority given to passenger vehicles over freight vehicles in urban transport, can adversely impact efficiency of freight vehicle movement
- The encroachment of urban development on freight routes and precincts as cities grow and density leads to an increased potential for amenity, environmental and interface issues.

The *Melbourne–Brisbane Inland Rail Alignment Study* (ARTC, 2010) indicated:

- There are likely to be capacity constraints on the existing coastal railway unless significant capital works are undertaken
- The coastal railway between Sydney and Brisbane would reach capacity around 2052.

Issues associated with existing regional rail systems include old infrastructure with maintenance and renewal issues. Poor maintenance of rail lines leads to more freight being transported by road, imposing additional maintenance burdens on affected local governments (Infrastructure Australia, 2015).

2.2.3 Assessment of demands for Inland Rail

Continued growth in freight volumes is giving rise to a range of increasingly complex challenges for government, industry and the community. Over the last four decades, the Australian freight task (that is, the amount of freight transport, usually measured in tonnes or tonne-kilometres) has quadrupled, with major increases evident in road and rail transport. Forecasts indicate that the total freight task will continue to grow and is estimated to nearly double by 2030 based on 2010 levels.

The *Programme Business Case* (ARTC, 2015) provides a detailed description of the potential demand for Inland Rail. Demand projections have been used to:

- Estimate potential revenue generated by Inland Rail
- Assess the economic benefits arising from the mode shift from road and the coastal route to Inland Rail
- Determine an appropriate capacity for Inland Rail
- Determine appropriate service frequency and the impact of this on capacity use, railway and train operating costs.

The demand analysis indicates:

- Inland Rail is expected to increase rail's share of the Melbourne to Brisbane freight market from the current 26 per cent to 62 per cent by 2049–2050. Similarly, it is estimated that Inland Rail would increase rail freight's share of the Adelaide to Brisbane market by 28 per cent and Brisbane to Perth's share by 7 per cent.
- Better connections to the Port of Brisbane would result in an estimated 2 million tonnes of freight shifting from road to rail by 2049–2050, particularly grain and cotton from New England north-west, as well as grain on both rail and road from the Darling Downs to the Port of Brisbane
- In NSW, a significant tonnage of grain (about 7.5 million tonnes) would also use Inland Rail on its way to NSW ports
- Inland Rail would induce an increase in freight from the current 8 million tonnes to 19.5 million tonnes.

2.3 Need for the proposal

2.3.1 Need for Inland Rail

The *National Land Freight Strategy* (Standing Council on Transport and Infrastructure, 2012) notes, 'the efficient movement of land freight is crucial for Australia's productivity and competitiveness and affects the lives of every Australian'. The existing rail mode share of freight between Melbourne and Brisbane (averaging the two directions) varies between approximately 22 per cent to 27 per cent for non-bulk freight, to 60 per cent to 90 per cent for commodities transported in bulk (ARTC, 2010).

The *National Land Freight Strategy* (Standing Council on Transport and Infrastructure, 2012) identifies infrastructure supporting the movement of land freight, such as road, rail and ports, must be sufficient for significant projected growth in demand for freight transport.

Rail is generally the most productive and efficient mode for freight travelling from regional areas to export ports and urban destinations. Rail has traditionally dominated the freight market for mining and agricultural commodities, particularly iron ore, grains, rice, cotton, and sugar for processing or export (ARTC, 2015). As noted by the Australian Government Minister for Infrastructure and Regional Development (2013), 'an efficient rail freight network is the key to effective supply chains, national productivity and competitiveness'.

Inland Rail is needed to improve the efficiency of freight moving between Melbourne and Brisbane, bypassing the Sydney metropolitan area; it would substantially cut the overall journey time to less than 24 hours and increase the reliability of services between Melbourne and Brisbane (Infrastructure Australia, 2016). This efficiency improvement is expected to increase the competitiveness of rail transport relative to road transport (ARTC, 2015).

The *Australian Infrastructure Audit* (Infrastructure Australia, 2015) identifies that 'rail offers an alternative to road transport, and societal benefits in terms of lower emissions, reduced road congestion and increased safety per tonne kilometre, particularly over longer distances or when carrying heavy goods'.

In summary, Inland Rail is needed to respond to growth in demand for freight transport, and address existing freight capacity and infrastructure. Analysis of demand undertaken by ARTC indicates sufficient demand for Inland Rail.

With respect to the need for Inland Rail, the Inland Rail Implementation Group (2015) found:

- Without Inland Rail, the amount of freight travelling by road between Melbourne and Brisbane in 2050 will be approximately 7.1 million tonnes, 2.3 million tonnes more than what would be on the road with Inland Rail
- Key transport links are experiencing increasing capacity constraints and congestion due to inadequate infrastructure
- Current investment in road and rail is insufficient to address Australia's future freight task
- Further population and freight growth along the north–south corridor will increase demand for transport services at a local, state and national level, placing freight corridors under severe pressure and compounding inefficiencies that already exist
- If capacity constraints and congestion resulting from inadequate infrastructure are not overcome, national productivity and economic growth will be constrained, with environmental and safety outcomes also becoming increasingly sub-optimal.

2.3.2 Need for the proposal

The proposal involves constructing approximately 30 km of new track and associated facilities between North Star in NSW and the NSW/QLD border. The proposal follows the existing non-operational Boggabilla rail corridor for approximately 25 km towards Whalan Creek. The proposal continues along a 5 km section of greenfield rail corridor towards the NSW/QLD border. The NSW/QLD border is defined by the centre point of the Macintyre River.

For design purposes, the delivery model for the proposal includes a 7 km section of new track north of the NSW/QLD border that ties into the existing Queensland Rail South Western Line near Yelarbon, Queensland. For the purpose of obtaining necessary environmental approvals, this 7 km section of new track will be assessed as part of the Inland Rail—Border to Gowrie project, for which a separate EIS under the *State Development and Public Works Organisation Act 1971* (Qld) (SDPWO Act) is currently being prepared.

As part of the wider Inland Rail route, the proposal will play a part in achieving improved travel times for freight between Melbourne and Brisbane. It will contribute to a reduction in the distance travelled by freight and an increase in the amount of freight that may be transported between Melbourne and Brisbane. It will also provide a new, efficient connection between regional farms in the area and international export markets.

The proposal is a 'missing link' of the inland rail route between Melbourne and Brisbane; therefore, Inland Rail cannot proceed if the proposal does not proceed, which means the benefits of Inland Rail would not be realised.