







Copyright

This publication is protected by the *Copyright Act 1968*. © State of Queensland, 2024.

Disclaimer

While every care has been taken in preparing this publication, to the extent permitted by law, the State of Queensland accepts no responsibility and disclaims all liability (including without limitation, liability in negligence) for all expenses, losses (including direct and indirect loss), damages and costs incurred as a result of decisions or actions taken as a result of any data, information, statement or advice, expressed or implied, contained within. To the best of our knowledge, the content was correct at the time of publishing.

Translating and interpreting assistance

The Queensland Government is committed to providing accessible services to Queenslanders of all cultural and linguistic backgrounds. If you have difficulty

understanding this publication and need a translator, please call the Translating and Interpreting Service (TIS National) on 13 14 50 and ask them to telephone the Queensland Department of Transport and Main Roads on 13 74 68







Port of Brisbane planning overview

The Australian and Queensland governments are undertaking investigations to explore improved freight rail connectivity to the Port of Brisbane.

In 2019, as part of the Inland Rail Bilateral Agreement, the Australian Government committed \$20 million to undertake further investigations for an improved rail freight connection to the port. This planning is being progressed by the Department of Transport and Main Roads in collaboration with the Australian Government's Department of Infrastructure, Transport, Regional Development, Communications and the Arts.

This summary report summarises the findings of technical planning investigations and next steps for the Port of Brisbane Further Planning project.







The Port of Brisbane is one of Australia's fastest growing and most diverse ports. The scale and significance of trade passing through the Port of Brisbane makes it a nationally significant port and critical to supply chains and Queensland's economy.

A significant increase in demand for freight in Queensland is being driven by strong population growth in South East Queensland (SEQ), international demand for natural resources and agricultural products, new technologies and global sourcing. The future delivery of Inland Rail to Queensland will also increase freight demands.

Careful planning is needed to ensure Queensland maximises the economic benefits associated with freight growth and the introduction of Inland Rail, while managing the impacts of increasing demand on the transport network and communities.

A dual gauge rail line currently connects the Port of Brisbane to Acacia Ridge and a narrow gauge line connects the port to the Ipswich and West Moreton and North Coast rail lines. Sections of the rail freight network are shared with passenger services, with freight trains restricted from operating during peak commuting periods within the Brisbane metropolitan network.

Critical rail junctions where passenger and freight trains compete for access can also introduce travel time delays. With population growth in SEQ predicted to grow from 3.8 million to 5.4 million

by 2041, competition for the rail network between freight and passenger needs will intensify.

Despite a growing freight task at the Port of Brisbane, operational and reliability constraints on the shared passenger/freight rail network have contributed to a decline in rail usage over the past two decades. Rail share for containerised freight has declined from 12 per cent in 2006 to less than 2 per cent currently. This means over 98 per cent of the region's containerised freight task travels on road via heavy vehicles. This is in contrast to domestic and global ports which are targeting and achieving rail modal shares of more than 20–30 per cent.

Moving more freight on rail to the Port of Brisbane will reduce the number of trucks on roads, easing congestion and improving liveability in SEQ. It will also help Queensland support the Australian Government's goal to increase national productivity and competitiveness through the coordinated delivery of infrastructure investment across Australia, including through better connectivity of rail and port infrastructure.



Port of Brisbane handles more than

\$65 billion

of trade annually

The Port of Brisbane supply chain generates almost

\$8 billion

in economic activity, growing to over

\$15 billion

in 2050*

Freight transported in shipping containers by rail currently represents

<2%

of the overall total



Freight handled by the Port of Brisbane is expected to grow at

4.8%

per year

The Port of Brisbane supply chain generates almost

64,000

jobs directly and indirectly, growing to over

124,000

jobs in 2050.*

Port of Brisbane container throughput of

1,560,000

Twenty-Foot Equivalent (TEU) in 2023**

^{*} Port of Brisbane's Economic Contribution (portbris.com.au)

^{**} Source: Port of Brisbane Pty Ltd



The Port of Brisbane investigations are exploring improvements to freight rail connectivity to the Port of Brisbane, including the need and timing for a dedicated freight rail corridor.

Investigations have identified a range of challenges and desired outcomes associated with enhancing the capacity, reliability and performance of the freight rail network to the port. These have provided the basis for developing potential options, both infrastructure and non-infrastructure, to achieve the desired outcomes for competitive and efficient rail access to the Port of Brisbane.

The identification and assessment of potential solutions is underpinned by the following key considerations:

- responding to forecast rail growth over time
- supply chain requirements
- broader transport network integration and efficiency
- community needs and impacts
- cost and value-for-money considerations.

Challenges



Rail network
infrastructure
constraints are
limiting rail freight
capacity to and from
the Port of Brisbane



Operational conflicts and restrictions on a shared rail network reduce service reliability and efficiency, inhibiting rail freight competitiveness



The SEQ freight supply chain's reliance on road to and from the Port of Brisbane means the network is vulnerable to delays and disruption

Desired outcomes



Safer movements for all modes



Increased carrying capacity of rail freight



Improved reliability and attractiveness of using rail freight to and from the Port of Brisbane



Minimal impacts on surrounding natural, social, and built environments



Improved resilience and connectivity for the transport network



Demand and capacity

The Department of Transport and Main Roads has undertaken detailed freight demand analysis and modelling to inform technical investigations being undertaken. This work has provided contemporary freight demand forecasts and estimated demand for freight rail services on the rail network out to 2051.

Examining a range of freight growth scenarios, the demand forecasting and modelling produced estimates of freight movements by commodity.

Dedicated corridor

Previous studies and current strategic planning supports the need for a dedicated freight rail corridor at some stage in the future. This longer term opportunity would separate a freight rail connection to the Port of Brisbane from a large section of the metropolitan rail network.

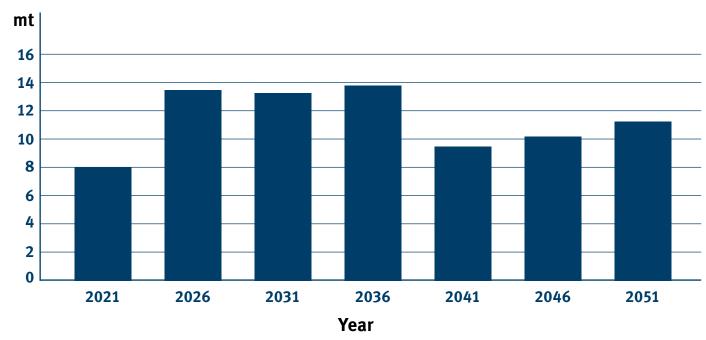
The potential need and timing of a dedicated rail connection will continue to be monitored against changes to freight demand over time as well as other potential future drivers such as a shift toward greater inland port operations.

While recognising that freight growth is subject to market conditions, based on current trends, demand forecasts suggest rail freight to the Port of Brisbane:

- increases strongly by the late 2020s, driven by short-term natural resource exports
- remains largely steady through to the mid 2030s, then declines into the early 2040s
- experiences renewed growth in the period up to 2051 but does not regain the levels forecast for the 2030s.

The analysis indicated demands for rail freight to the Port of Brisbane are forecast to exceed the reliable capacity of the rail network within the next decade. The demand modelling and analysis also concluded that modest improvements to the existing rail network will likely provide sufficient capacity in the short to medium term. A dedicated corridor will be needed in the future and while it remains a longer-term consideration, planning is required to preserve a corridor in the medium term.

Forecast rail freight in million tonnes (mt) to/from the Port of Brisbane*



^{*}Department of Transport and Main Roads freight forecasting. Freight forecasts are subject to market dynamics.



Port of Brisbane Further Planning

The Department of Transport and Main Roads, in collaboration with the Australian Government's Department of Infrastructure, Transport, Regional Development, Communications and the Arts, is undertaking further planning for an efficient and reliable rail freight connection to the Port of Brisbane to address future demand needs.

These investigations are assessing a range of infrastructure and non-infrastructure improvements to the existing rail corridor by:

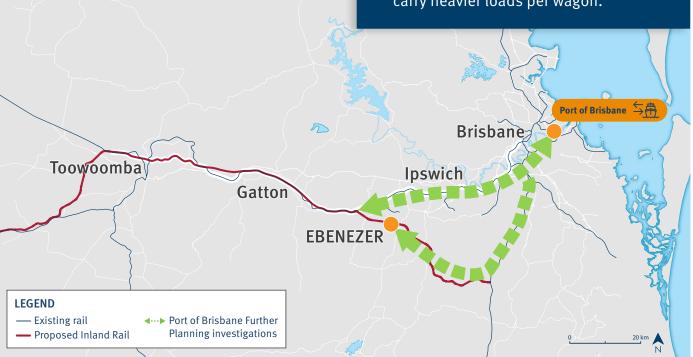
- considering freight demand forecasts across a range of commodity types, including containerised goods, from recently completed freight forecasting
- conducting rail operational modelling to ensure measurable reliability and efficiency benefits
- undertaking technical, social, economic, and environmental analysis to inform option development and recommendations
- considering compatibility and redundancy in light of future Inland Rail works and value-formoney outcomes.

In late 2023, initial technical investigations focused on the existing rail freight connection between Yeerongpilly and the Port of Brisbane were completed.

This connection is strategically important as it is a common rail line for all rail freight travelling to and from the port. The next stage of investigations will examine short, medium and longer-term improvements to the rail network that may be required between a future Inland Rail intermodal terminal at Ebenezer and the Port of Brisbane. This will include consideration of social, economic and environmental constraints as well as the value for money of any identified rail network solutions.

Potential improvements to the existing freight rail connections to the Port of Brisbane being investigated include:

- operational changes to the network such as timetabling and improved signalling
- track capacity enhancements to improve train passing opportunities and freight throughput
- introducing grade separations at rail level crossings
- use of longer trains or trains that can carry heavier loads per wagon.





Maintaining efficient freight rail access to the Port of Brisbane will be critical as freight demand increases. This will require timely investment to ensure rail infrastructure capacity matches demand and freight can be transported through the network reliably and safely.

The opportunity to move more freight on rail will assist in balancing network capacity, in turn alleviating road congestion, improving road safety and providing environmental and community benefits.

The Australian and Queensland governments have progressed key investigations into rail freight access to the Port of Brisbane and are working together to undertake the next stage of investigations. These will focus on the existing freight rail network between the Port of Brisbane and proposed Inland Rail terminal at Ebenezer, including short, medium and longer-term network needs.

Independent Review of Inland Rail

In October 2022, the Australian Government announced the Independent Review of Inland Rail, with its findings released in April 2023.

As part of the Australian Government's response, a staged approach is being taken to the delivery of Inland Rail, prioritising construction from Beveridge in Victoria to Parkes in New South Wales by 2027.

Further delivery of Inland Rail north of Parkes will be considered by the Australian Government as project approvals are gained and program costs become more certain.

Stakeholder engagement

An Industry Reference Group assisted in the delivery of technical investigations and included representatives from:

- Australian Rail Track Corporation
- Brisbane City Council
- Cross River Rail Delivery Authority
- Port of Brisbane Pty Ltd
- Queensland Rail.

Continued engagement with key stakeholders will be an integral part of further planning, ensuring solutions are fit-for-purpose, deliver network benefits and offer value for money.