

Toowoomba to Brisbane Passenger Rail Summary Report

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Australian Government

BUILDING AUSTRALIA



Queensland Government

Introduction

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The Australian and Queensland governments have partnered to explore improved public transport connectivity between Toowoomba and Brisbane through a faster and more regular regional passenger rail service.

Located approximately 125km west of Brisbane, Toowoomba is the second largest inland city in Australia. Economic development throughout the region in recent years has driven investment, employment and population growth, increasing travel demand to and from Toowoomba.

Travel between Toowoomba and Brisbane involves relatively long travel distances. Due to limited travel options, residents typically rely on private vehicles for most trips, particularly between the more dispersed communities west of Ipswich.

The Australian and Queensland governments have completed a Strategic Business Case which investigated the options, benefits and timing for improved passenger rail services between Toowoomba and Brisbane.

A key objective of the study was to make best use of existing and planned infrastructure and transport corridors. Investigations focused on opportunities to use planned Inland Rail infrastructure for both freight and passenger services, providing a value-for-money passenger rail solution.

This report summarises the findings of the Toowoomba to Brisbane Passenger Rail Strategic Business Case, including the options investigated and next steps for the project.



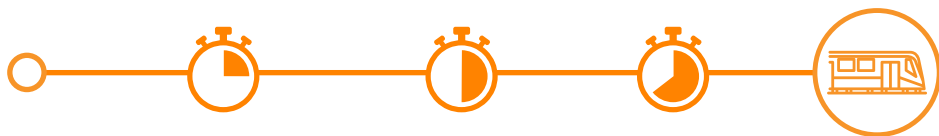
Background

In 2003, the Department of Transport and Main Roads and Queensland Rail completed the Gowrie to Grandchester (G2G) Rail Corridor Study.

The G2G study identified and protected a rail corridor that would provide improved freight rail services and faster passenger rail services. This protected corridor now forms part of the proposed alignment for the Melbourne to Brisbane Inland Rail project. Future development of the corridor as part of Inland Rail provides an opportunity to also improve passenger rail services along the corridor and deliver a better integrated transport network in South East Queensland.

In November 2019, the Australian and Queensland governments signed the Inland Rail Bilateral Agreement, which included the commitment to undertake a Toowoomba to Brisbane Passenger Rail Strategic Business Case.

The Bilateral Agreement requires Inland Rail to accommodate current and reasonably anticipated future passenger and freight rail services between Brisbane and Toowoomba, with passenger rail operations subject to capacity and available train paths.



Study overview

The Strategic Business Case assessed the demand for passenger rail services in the Toowoomba to Brisbane corridor and identified potential options to meet this demand. The study investigated passenger demand needs over a range of time horizons that extended out 50 years.

The study investigated options for providing improved and faster public transport access and connectivity between key centres in the Toowoomba to Brisbane corridor. It considered opportunities for improving social and economic outcomes for local communities by enhancing their access to employment, health, recreation and education opportunities within the region.

While the Strategic Business Case considered the entire Brisbane to Toowoomba corridor, the study area was focused on solutions between Toowoomba and Ipswich.



The Strategic Business Case:

- evaluated current and anticipated future capacity and forecast travel demand for public transport services between Toowoomba and Brisbane
- investigated options for improving passenger rail services using existing and proposed rail infrastructure and protected rail corridors
- explored the opportunity for integrating passenger rail services with future freight operations on new Inland Rail infrastructure between Gowrie and Calvert
- developed options for future passenger rail infrastructure and for improved passenger rail services between Toowoomba and Brisbane
- assessed options to meet short, medium and long-term forecast transport demand, including opportunities for staging the delivery of infrastructure and services.

Study process

The study explored a range of options to deliver a value-for-money passenger rail solution in the Toowoomba to Brisbane corridor.

Planning and analysis helped define the need for an improved passenger rail connection, as well as identifying challenges and opportunities within the Toowoomba to Brisbane corridor. Options were guided by a series of desired outcomes for the region's transport network.

The study process was consistent with the Queensland Government's Project Assessment Framework (PAF) and the Infrastructure Australia Assessment Framework.

The Strategic Business Case incorporated the first two stages of the PAF, namely the Strategic Assessment of Service Requirements and Preliminary Evaluation.

Challenges and opportunities



Limited public transport choice and connectivity with low frequency services and comparatively long travel times



Mainly private vehicle travel leading to undesirable outcomes such as congestion, delays and emissions



Limited public transport options constraining access to employment and social opportunities



Opportunity to use planned Inland Rail project for future passenger rail services

Desired outcomes



Improve the safety of the transport network through fewer cars on roads



Improve the attractiveness of public transport to enhance travel choice and provide a better customer experience



Improve regional connectivity, accessibility and transport network resilience



Improve efficiency and sustainability of the transport network



Optimise the public transport network through integration with other planned infrastructure

Options generation and analysis

A range of options were developed to address challenges, make best use of existing infrastructure, maximise the opportunity from proposed Inland Rail infrastructure and achieve desired outcomes for communities and the broader transport network.

Options were assessed, refined and progressively narrowed down. Technical investigations included analysis of environmental and social impacts, costs and staging opportunities to address transport needs over time.

The first stage of the investigation identified 23 options for further evaluation. From this, 10 options were shortlisted based on their ability to meet desired transport outcomes and project objectives.

The shortlisted options were then assessed in more detail. Assessment was undertaken in consultation with key stakeholders, including local governments within the study area. This enabled the study to capture local planning, economic, environmental and social inputs and insights.

This work resulted in four options that underwent further detailed assessment and refinement to identify the highest performing option.



Options overview

Option 1

A passenger rail service using the existing Queensland Rail network from Helidon to Brisbane, with the journey between Helidon and Toowoomba requiring interchange with other modes, including a connecting bus service.

This option showed limited improvement to current travel times, low passenger rail demand, and does not make use of the proposed Inland Rail infrastructure.

Option 2



Using proposed Inland Rail infrastructure from Gowrie (just north of Toowoomba) to Calvert (west of Rosewood) and then using the existing rail network for the rest of the journey to Brisbane.

This was the highest performing option in the medium to long-term as it provided an improved passenger rail service for the best value-for-money through use of proposed Inland Rail infrastructure.

Best performing option

Option 3

Construction of a dedicated regional passenger rail line between Toowoomba and Darra with rail services then continuing through to Brisbane.

This option involved significant construction costs, including new rail tracks and major upgrades to existing infrastructure, making it economically unfeasible in the short to medium-term. There would also be substantial environmental and property impacts.

This option has the potential to form part of a long-term solution once shared use of Inland Rail infrastructure is no longer possible.

Option 4

A passenger rail service using a mix of the proposed Inland Rail infrastructure and Queensland Rail network, and then routing trains via a connection to the Ipswich to Springfield public transport corridor (currently in planning).

This option would have significant environmental and property impacts. It is also reliant on the construction of the Ipswich to Springfield public transport corridor as a rail line. However, this option is compatible with Options 2 and 3 and could form part of a longer-term staging opportunity.

The Strategic Business Case identified a preferred medium-to long-term option (Option 2) that would improve connectivity and accessibility, reduce passenger travel times, and provide a more direct trip through the use of the tunnels proposed to be delivered as part of Inland Rail. It would also provide a value-for-money solution by making best use of existing rail tracks and new Inland Rail infrastructure.

Key benefits of Option 2 include:

- allows for the entire journey between Toowoomba and Brisbane to be completed by rail with a travel time comparable to travel by car
- utilises existing Queensland Rail infrastructure on the West Moreton Line and enables rail services at higher speeds within the same corridor
- minimises constraints from competing freight rail operations on the Inland Rail line
- provides improved connectivity to existing established regional centres
- provides an opportunity to upgrade facilities and accessibility at key stations
- includes potential extension opportunities to Wellcamp Airport and Toowoomba South
- makes use of proposed Inland Rail infrastructure to enable shorter journey times through the Toowoomba and Little Liverpool crossings.

Independent Review of Inland Rail



The Australian Government announced the Independent Review of Inland Rail in October 2022 and findings were subsequently released in April 2023.

The Australian Government is taking a staged approach 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 the costs of the program become more certain.

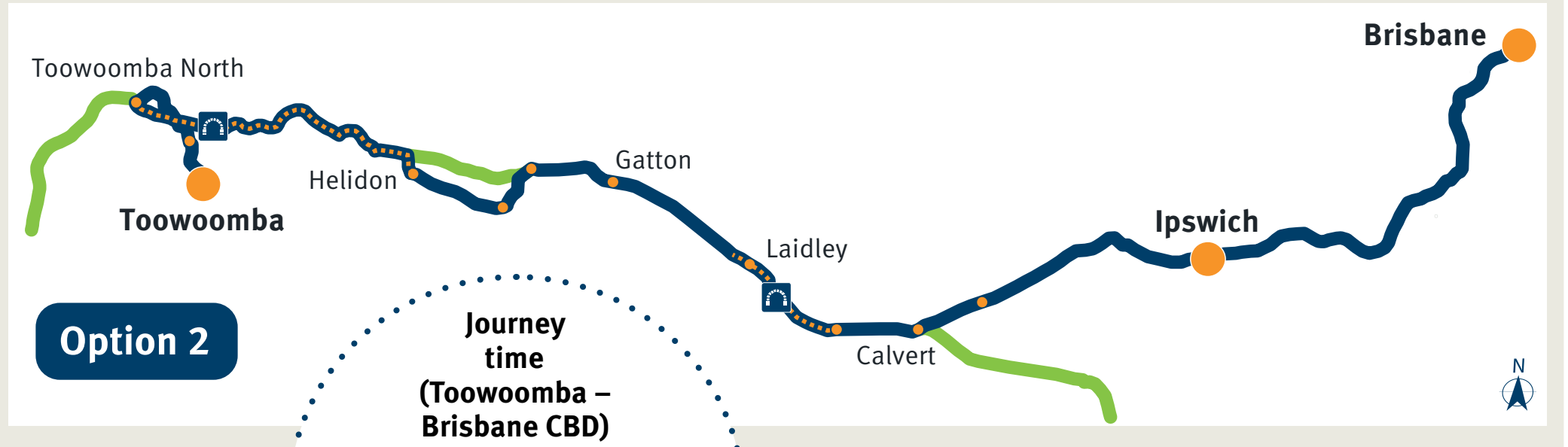
Future delivery of the preferred option identified in the Toowoomba to Brisbane Passenger Rail Strategic Business Case relies on delivery of Inland Rail in Queensland.

The forecast demand for all options assessed is modest, which reflects the lower population levels in the corridor between Toowoomba and Ipswich. The study found that all options assessed had a very high capital cost with a relatively low benefit-to-cost ratio. Improving the economic case for the project, along with wider benefits, would require further exploration in the future.

Preferred medium to long-term option conceptual overview

Legend

- Proposed Inland Rail
- Option 2 Conceptual Alignment
- Option 2 shared use with Inland Rail infrastructure
- Rail station
- Proposed Inland Rail Tunnels



Option 2

Journey time
(Toowoomba – Brisbane CBD)
~ 130 mins

Frequency
up to 18 services/day

Demand
up to 4,000 passengers/day



Next steps

Delivery of the preferred Toowoomba to Brisbane passenger rail solution investigated in the Strategic Business Case relies on the provision of new Inland Rail infrastructure between Gowrie and Calvert, in particular the proposed tunnels through the Toowoomba and Little Liverpool ranges. It also requires new infrastructure and upgrades to existing rail infrastructure across the corridor.

Further planning of the Toowoomba to Brisbane passenger rail project will be considered closer to the time of Inland Rail delivery in Queensland. The need for further business case development would be considered at that time.

In the short-term, further planning of Inland Rail will ensure the design of Inland Rail infrastructure allows for future passenger rail services.

The Department of Transport and Main Roads will also ensure the opportunity for a dedicated passenger rail corridor in the long-term remains a strategic consideration.



Stakeholder engagement

Development of the Strategic Business Case was undertaken 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.

Key stakeholders were closely involved throughout the study and included Queensland Rail, Australian Rail Track Corporation, Toowoomba Regional Council, Lockyer Valley Regional Council, Ipswich City Council and Brisbane City Council. This provided valuable technical and local knowledge and planning expertise to inform the study.

Consultation will be an important part of the project's future development and ensure the community has an opportunity to provide feedback that informs design considerations.

Project updates can be viewed on the Department of Transport and Main Roads' project website:

www.tmr.qld.gov.au/projects/toowoomba-to-brisbane-passenger-rail-strategic-business-case

