

2012-2013 Assessment Brief

Recommended rating:	Threshold
Status in 2012 report to COAG:	Real potential
Initiative Name:	Gateway Motorway Upgrade North – Nudgee Interchange to Deagon Deviation
Geography:	Brisbane, Queensland
Proponent:	Queensland Department of Transport and Main Roads
Project description:	
<p>The Queensland Government is seeking \$1,263 million in Commonwealth funding for a series of upgrades to the Gateway Motorway North, including widening of approximately 10 kilometres of the motorway from four to six lanes between Nudgee and Deagon.</p> <p>The Queensland Government provided a business case for the project during the 2012-13 round of submissions. Based on this additional information, the project has progressed on the priority list and is now recommended at Threshold.</p> <p>Objectives:</p> <p>The objective of the project is to support the economic growth potential of the Australia Trade Coast precinct, Port of Brisbane and adjoining commercial area. Gateway Motorway Upgrade North aims to achieve this through the provision of a safe and efficient urban bypass road that enables seamless access between markets, production and distribution centres, the Port of Brisbane and Brisbane Airport. In doing so it aims to reduce input costs to business and industry.</p> <p>Problems:</p> <p>The problems identified are increased congestion and crash rates on the Gateway Motorway North, stemming from an increased number of commuter car trips, and activity expansion across the Australian Trade Coast Precinct and the Port of Brisbane. In 2011, the Gateway Motorway North carried over 75,000 vehicles per day, with daily flows expected to increase by over 60 percent by 2026.</p> <p>Solution:</p> <p>The proposed solution involves a range of upgrades to the Gateway Motorway North, including:</p> <ul style="list-style-type: none"> • Widening of the motorway from four to six lanes between Nudgee and Deagon; • A cycle way alongside the motorway corridor; • Reconfigured Nudgee Interchange, including a new Nudgee Road bridge over the Motorway; • Interchange development at the Gateway Motorway/Deagon Deviation connection; and • A range of new and upgraded ramps and bridges. <p>The Gateway Motorway North section links directly to the Bruce Highway and industrial/commercial precincts in Northern Brisbane and is the primary road link to and from the Port of Brisbane.</p>	
Proponent's capital cost estimate (nominal):	\$1,300 million
Contribution sought by Proponent including requests for project development funding (nominal):	\$1,263 million
Project timing Start/Completion by Proponent:	2014 / 2017

BCR stated by proponent:

4.9 for Stage 2

3.7 for Stages 2 and 3

Strategic alignment summary

Alignment with Infrastructure Australia's strategic priorities:

The project aligns Infrastructure Australia's strategic priorities to 'increase productivity', 'expand productive capacity' and 'build on Australia's global competitive advantages' through delivering a more efficient freight network.

The Gateway Motorway connects to Brisbane's international gateways – the Port of Brisbane and Brisbane Airport – and forms part of the provisional National Freight Network and the National Land Transport Network. The project will contribute to one of the goals identified in the National Land Freight Strategy: completion of the northern link of the Gateway Motorway to freight specifications.

Alignment with state strategies:

The Queensland Government has not published infrastructure strategies since taking office in March 2012. State infrastructure plans published by the previous government recognise the project is a priority infrastructure upgrade, however the status of these plans under the current government is not clear.

Problem assessment summary

The core problems identified in the submission are traffic congestion, poor separation of local trips and freight movements, and high crash rates on the Gateway Motorway North.

Congestion has resulted from increasing local trips on the motorway and increasing work travel during peak periods. In 2011 over 75,000 vehicles per day used the Gateway Motorway North, with around 13 percent being medium and heavy commercial vehicles (Austroads Class 3 and above). Travel demand is expected to grow beyond 120,000 vehicles per day by 2026. The submission mentions that some links on the Gateway Motorway North operate at or near capacity for over six hours per day in the direction of peak traffic flow.

The submission states that the rising level of congestion has been a significant causal factor in the increase in crashes. The Gateway Motorway North crash rate is growing faster than vehicle kilometres travelled (the crash rate has increased by 71 percent while the vehicle kilometres travelled has only increased by 32 percent over a ten year period).

The submission notes that the crash rate on the motorway between Nudgee and the Deagon Deviation for the 10 years to 2009 was 34 per 100 million vehicle kilometres. The submission notes that this is considerably higher than that for the Pacific Motorway.

The causes of increased congestion are understood to include growth in trade, rising population levels, economic development and the expansion of the Australian Trade Coast precinct.

The causes of the problem could be further explored for longer term planning. For example, the impact of a lack of road pricing, land use planning decisions and the lack of public transport alternatives. The impacts of these factors have not been quantified or presented in a way that could help determine alternative options to address the root causes of congestion.

Solution assessment summary

The preferred solution is a suite of upgrades to the Gateway Motorway North, including widening of approximately 10 kilometres of the motorway from four to six lanes between Nudgee and Deagon, interchange works and ramp upgrades.

The solution assessment considered a short-list of options. Four options considered upgrades to the existing highway, and a fifth option considered construction of a new four-lane highway on a new alignment. Whilst a road-based solution is a reasonable response to the problem in the short term, reform options and alternative modes to provide an integrated transport system in the longer term need to be considered.

The submission includes a discussion of options for road pricing, including a high occupancy toll, express toll lane and monetising ramp meter delay, however these options are dismissed without adequate justification. Concerns with road pricing raised in the submission include reduced viability due to the impact of tolls on patronage and a strong rationale for public sector funding due to market failure.

Given that the root cause of the problem is growth in freight traffic and population, detailed consideration of reform measures, targeted measures to improve freight efficiency and public transport options for addressing passenger vehicle congestion need to be addressed as part of a long term integrated transport plan for Brisbane.

BCR appraisal conclusion

A stated BCR of 4.9 is provided for Stage 2 and of 3.7 is provided for Stages 2 and 3. The economic assessment framework broadly complies with cost benefit guidelines however some aspects of the methodology have not been outlined or explained leading to an assessment that the BCR has been slightly overstated.

As part of the project development process, refinements to project scope have been made, with capital costs for the project close to 35% lower than those reported in the previous 2011-12 submission.

Infrastructure Australia Priority List recommendation

The Office of the Infrastructure Coordinator recognises that Brisbane's road network is showing increasing levels of congestion and there is significant road congestion to the Port of Brisbane via the Gateway Motorway.

It is recommended that the project be included in the Infrastructure Priority List at **Threshold** with the following conditions:

- The proponent provides demand models to determine whether the project would still be economically viable in the presence of efficient road pricing, and includes user charging at a rate that reflects efficient pricing as part of any road based solution;
- The proponent considers a broader range of reform and investment options in future long term infrastructure strategies, including:
 - making better use of existing networks;
 - public transport alternatives;
 - direct user tolls or charges to recover costs and influence demand; and
- The project business case includes confirmation of 'Double Early Contractor Involvement' as the preferred delivery method and further information on the relative value-for-money merits of a PPP delivery of the project.

Attachments

Figure 1: Gateway Motorway North

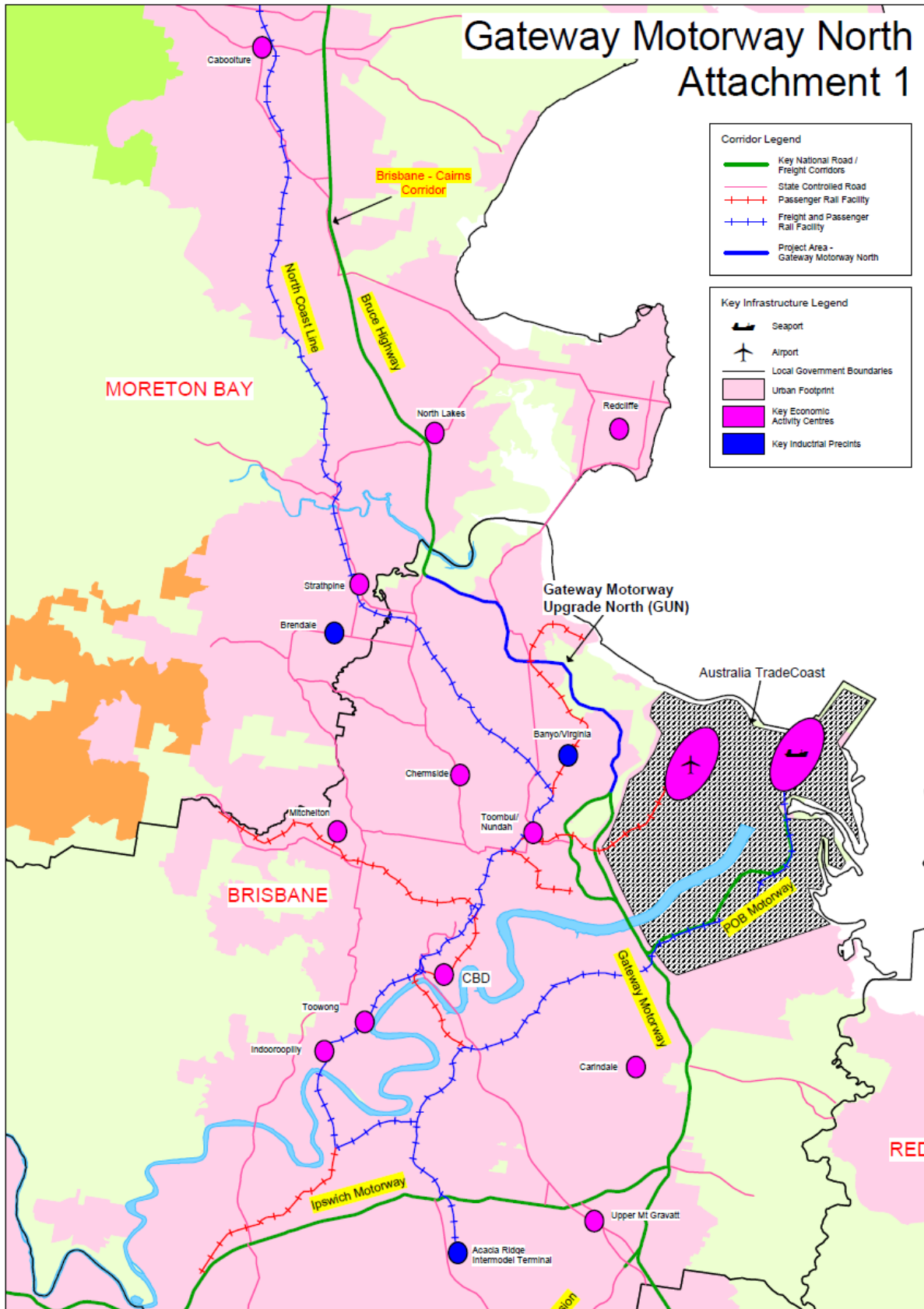


Figure 2: Gateway Motorway North draft plans

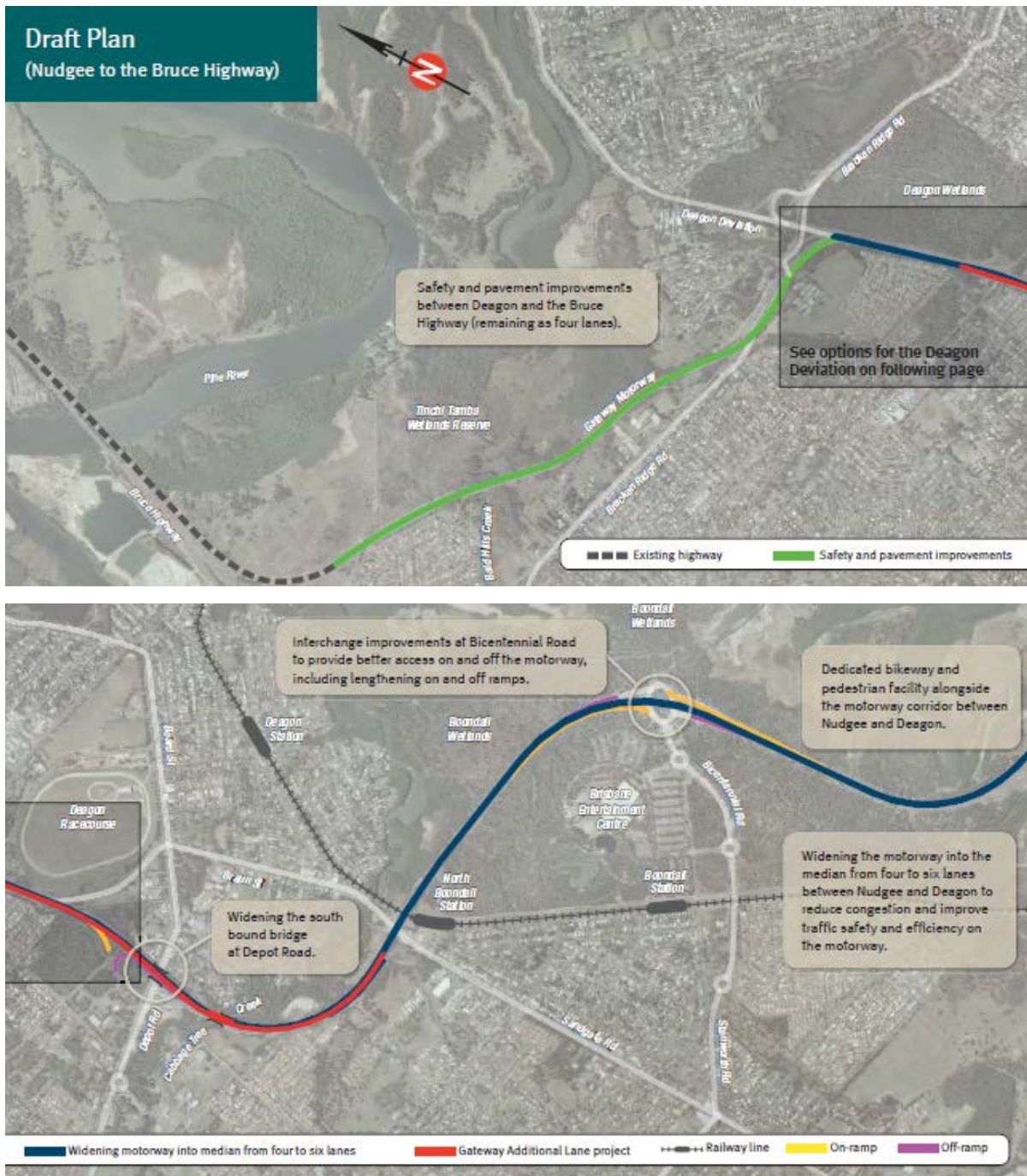


Figure 3: Gateway Motorway North draft plans (continued)

