2012-2013 Assessment Brief

Recommended rating:	Threshold
Status in 2012 report to COAG:	New submission
Initiative Name:	North West Coastal Highway – Minilya to Barradale
Geography:	Pilbara, Western Australia
Proponent:	Main Roads Western Australia
Project description:	

The Western Australia Government is seeking \$143.2 million of Commonwealth funding towards road widening on the North West Coastal Highway in the Pilbara region of Western Australia. The project will complete the last section of widening for the Highway.

The proponent has indicated the project is likely to be a priority for state funding from the Regional Infrastructure Fund.

Objective:

The objective of the project is to improve the efficiency and safety of freight and other vehicles on the highway by widening the sealed section and creating improved flood immunity to support the operation of wide and heavy vehicles.

Problem:

Much of the North West Coastal Highway was constructed in the 1960s and 1970s when it was a secondary road, with the inland Great Northern Highway carrying the majority of traffic to northern Western Australia. The coastal highway was created with minimal seal width and a number of floodways over intermittent creeks.

In recent years, significant development has occurred in the Pilbara region that has generated increased traffic on the coastal route. Much of the highway has already been widened to accommodate safer passing of vehicles. Many vehicles using the route are B-doubles and road trains. The narrow seal creates a safety issue for motorists and passing trucks, while the low-level floodways create delays in the monsoon period.

Solution:

The preferred solution is the staged widening and strengthening of the last remaining section of narrow highway along the North West Coastal Highway from Minilya to Barradale. The construction of two bridges has been removed from the original 2012 submission.

Proponent's capital cost estimate (nominal):	\$217 million (P90) original submission \$179 million (P90) updated December 2012 \$148 million (P50)
Contribution sought by Proponent including requests for project development funding (nominal):	\$143.2 million requested December 2012
Project timing Start/Completion by Proponent:	2014-2016
BCR stated by proponent:	1.8 (P50, 7% discount rate)

Strategic alignment summary

Alignment with Infrastructure Australia's strategic priorities:

The objective to improve the efficiency and reliability of the North West Coastal Highway is aligned with Infrastructure Australia's strategic objective to 'increase Australia's productive capacity'. The North West Coastal Highway forms part of the proposed National Land Freight Network.

The project meets the objectives of the Regional Infrastructure Fund.

Alignment with state strategies:

The objective to improve freight efficiency is aligned with the objectives of Main Roads Strategic Plan 2k12. The project is identified as a priority in the Draft Western Australian Regional Freight Transport Network Plan.

The Pilbara Planning and Infrastructure Framework identified upgrading the region's highways as a priority for 2015, although the North West Coastal Highway is not specifically listed as part of the region's primary road system.

The Western Australian Government has submitted additional projects to upgrade roads identified on the proposed National Land Freight Network serving the resources sectors in the north of the state. These are submissions for the Great Northern Highway (Muchea to Wubin) and Perth Darwin National Highway, immediately south of Muchea.

Problem assessment summary

The problem identified is that the North West Coastal Highway has been constructed to a standard that is not suitable for a main highway. In particular, the width of the sealed surface is not sufficient to enable vehicles currently using the road to pass safely.

The root cause is that the expansion in exploration and development of mineral and resources in Australia's North West has led to population and industry growth. The result is mining and construction activity putting a strain on existing infrastructure and exceeding planned infrastructure upgrades. The proponent states that the North West Coastal Highway supports 25 per cent of the nation's total port exports valued at \$55 billion per annum.

A significant proportion of traffic on the road are heavy and very heavy vehicles. The rate of growth of freight traffic on highway is expected to be four percent each year between 2011 and 2030. The submission would be strengthened by:

- An analysis of the impact on travel times and costs incurred as a result of the problems identified;
 and
- Identifying the extent to which the upgrades will provide for additional capacity.

Solution assessment summary

A range of options has been identified by the proponent, including road use management and improvements to coastal shipping as a long term option.

The proposed solution involves the widening and strengthening of the North West Coastal Highway from Minilya to Barradale (currently 6.2 metres wide compared to 9 metres wide for similar freight routes).

As the initiative is focused on improvements for high value freight, the proponent should investigate the benefits to freight beyond the benchmark values used in the Austroads standards. The proponent should also provide information about the level of freight industry support for the direct charging or contribution for infrastructure upgrades.

The submission includes a brief discussion of private financing options, however these options are dismissed.

BCR appraisal conclusion

A BCR of 1.77 was provided by the proponent, using a P50 estimate and 7 percent discount rate. This is an increase from 0.61 when the project was first presented. The increase is due to largely to the removal of two bridges from the scope (estimated cost of \$40M), and moving from the P90 to the P50 cost estimate.

It is recommended that a business case be developed to support an investment decision. This should include design optimisation and reform measures, detailed BCR, risk assessment and cost estimates and their peer reviews.

Infrastructure Australia Priority List recommendation

The Office of the Infrastructure Coordinator recognises the significance of the Northern Coastal Highway in supporting the development of oil and gas fields in Australia's North West.

It is recommended that the project be included on the 2013 Infrastructure Priority List at **Threshold** with the following conditions:

- The proponent provides a detailed business case including a robust economic analysis; and
- The proponent identifies potential measures to leverage financial contributions from freight operators that will benefit from the proposed upgrades.

This project is eligible for funding from the Regional Infrastructure Fund.

Attachments

Figure 1: Map showing project area in green (note that a better quality image is not available)

