2012 - 2013 Assessment Brief

Recommended rating:	Threshold
Status in 2012 report to COAG:	New submission
Initiative Name:	Great Northern Highway – Muchea to Wubin, Stage 2
Geography:	Wheatbelt region, Western Australia
Proponent:	Main Roads Western Australia
Project description:	

The Western Australian Government is seeking \$288.9 million of Commonwealth funding to upgrade sections of the Great Northern Highway between Muchea and Wubin in the Wheatbelt region.

The Commonwealth contributed \$98 million between 2003 and 2006 to Stage 1 of the project, and upgrades to other sections of the Great Northern Highway have previously been funded through Commonwealth funding programs.

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

Objective:

The objective of the project is to improve the efficiency, reliability and safety of the route between Perth and the north west of Western Australia.

Problem:

The problem identified is poor road quality on a section of the highway that is experiencing growth in heavy vehicle traffic volumes. Volumes of traffic on the highway are stated to range from 800 to 1,600 vehicles per day with approximately 35 to 50 percent of vehicles being heavy and high-wide load freight vehicles. The development and expansion of the energy and resource projects in the north of the state will result in an additional 100 high-wide load movements per day.

Specific problems are that there are limited opportunities for overtaking and that the road is not suitable for use by triple road trains which must currently decouple at Wubin. The Western Australian Government estimates that the costs of delays to general traffic in the corridor will be \$16 million annually by 2017.

Solution:

The proposed solution is a program of works along an 87 kilometre section of the highway between Muchea and Wubin. The program consists of reconstruction and realignment of selected sections of the Highway, upgrading intersections, widening the seal, and constructing additional passing lanes.

Proponent's capital cost estimate (nominal):	\$361 million (P90) \$301.5 million (P50)
Contribution sought by Proponent including requests for project development funding (nominal):	\$288.9 million
Project timing Start/Completion by Proponent:	2014 – 2018
BCR stated by proponent:	1.33 (P50, 7% discount rate)

Strategic alignment summary

Alignment with Infrastructure Australia's strategic priorities

The objective to improve the efficiency, reliability and safety of the route between Perth and the north west of Western Australia – and in particular to make the road more accessible for high productivity vehicles – is aligned with Infrastructure Australia's strategic objective to 'increase Australia's productive capacity'.

The Great Northern Highway forms part of the National Land Transport Network and the proposed National Land Freight Network.

The project aligns with the objectives of the Regional Infrastructure Fund.

Alignment with state strategic priorities

The objectives to improve freight efficiency and facilitate economic development by providing more road capacity, and to improve safety, are aligned with the objectives of *Main Roads Strategic Plan 2k12*. The project is listed as a priority within the *Draft WA Regional Freight Transport Network Plan*.

Problem assessment summary

The problems identified are deficiencies in the quality of the Great Northern Highway between Muchea and Wubin, such as width of seal, lack of overtaking options and unsuitability for triple road trains.

The main impacts are on passenger vehicles unable to pass freight, and heavy and high-wide load freight vehicles passing along the last remaining narrow section of the highway servicing the resources sector in the north of the state. The number of heavy vehicles and passenger cars on the road is increasing as economic activity in the region increases.

The Western Australian Government estimates that delays to general traffic are expected to be in the order of 400,000 vehicle hours per annum by 2017, with an estimated value of \$16 million.

Solution assessment summary

High level criteria have been used to assess a range of options including investment in rail and port infrastructure and non-infrastructure options such as changes to permit arrangements.

The only option assessed as worthy of further consideration is a program of works along 87 kilometres of the Great Northern Highway between Muchea and Wubin. The specific program of works consists of reconstruction and realignment of selected sections of the Highway, upgrading intersections, widening the seal, and constructing additional passing lanes.

A detailed assessment of the costs and benefits of upgrading each section of road is needed to ensure the final project is not overdesigned.

BCR appraisal conclusion

The proponent has provided economic analysis indicating that the BCR for the project is 1.33 (7 per cent discount rate and P50 outturn cost).

The economic analysis provided indicates the merits of the project. Based on the information provided, it is likely the project will have a BCR greater than 1.0 and it is recommended that the proponent proceeds with a more detailed economic investigation, including a peer reviewed economic appraisal. This should include an economic appraisal and key inputs including costs and demand. This work should be peer reviewed and based on P90 outturn costs.

Infrastructure Australia Priority List Recommendation

The Office of the Infrastructure Coordinator acknowledges the performance issues relating to freight movements on the Great Northern Highway.

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: The Great Northern Highway – Muchea to Wubin (source: Main Roads Western Australia)

