# 2014-2015 Assessment Brief

Recommended rating:	Subject to further consideration
Current rating on Infrastructure Priority List:	New submission
Initiative Name:	Princes Highway West – Winchelsea to Colac Duplication
Geography:	Victoria (West of Geelong)
Proponent:	VicRoads
Project description:	Sections 1-4

The project is for the delivery of the duplication of the existing Princes Highway West to a four lane divided highway between Deans March Road, Winchelsea and Corangamite Street, Colac. The works begin approximately 115 kilometres South West of Melbourne and cover a road length of approximately 37 kilometres.

# Project objectives include:

The goal statements for the project include:

- facilitation of greater commercial and industrial activity through reducing travel times and travel time variability between Winchelsea and Colac;
- improved road safety through reducing the frequency and severity of accidents; and
- improved amenity and liveability of coastal towns along the Great Ocean Road through reducing the traffic through coastal towns.

#### Problems the project seeks to address are:

There is a high variability in travel time along the relevant part of the Princes Highway due to the increasingly stop-start nature of travel. This in turn reflects a mix of slower speed traffic, lack of overtaking opportunities and conflict with traffic entering and exiting from side roads and properties. The problem is expected to worsen due to increasing transport demand. For example, traffic volumes increased by 55 per cent over the past 14 years. There is a risk of accidents due to limited overtaking opportunities coupled with restricted vision and presence of fixed roadside hazards.

#### **Project solution:**

The preferred option provides duplication and safety improvements along the stretch of the route between Winchelsea and Colac. Safety improvements include increased shoulder widths, wide median treatment, wide median intersection treatments, improving geometry of the road and relocating or protecting fixed roadside hazards. The option also includes 2km of rehabilitation and improvement works through Colac.

Capital Cost of Initiative by Proponent (\$ millions, nominal, undiscounted):	Base Cost: \$269 million
	P50: \$334.3 million P90: \$363.5 million
Contribution sought by Proponent including requests for project development funding (\$ millions, nominal, undiscounted):	\$181.74 million
Other funding (source/amount/cash flow) (\$ millions, nominal, undiscounted):	Proponent contribution \$181.74 million
High level development and implementation program (month/year):	Section 1: 2015-2017

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	Section 2: 2015-2019
	Section 3: 2017-2019
	Section 4: 2015-2016
BCR stated by proponent:	BCR based on 7% discount rate
	P90 0.08:1

## Strategic alignment summary

#### Alignment with Infrastructure Australia's Strategic Priorities:

Addressing the identified problems may increase Australia's productivity by enhancing the national freight network. A key goal of the project is to reduce travel times and travel time variability on approximately 37 kilometres between Winchelsea and Colac to facilitate greater commercial and industrial activity, including freight movements between Port of Portland and Port of Geelong. The project will cater for high productivity vehicles.

The route is on the National Land Transport Network. The road is a major regional Victorian freight route. The Princes Highway is the secondary route connecting Melbourne and Adelaide with the Western and Dukes Highway being the major interstate freight route.

#### Alignment with State Strategic Priorities:

This project is one of two projects to duplicate the Princes Highway from Geelong to Colac. The works have been split into two separate projects: Geelong to Winchelsea and Winchelsea to Colac. Construction for the \$220 million 23 kilometre duplication from Geelong to Winchelsea is currently underway. This submission relates to the duplication of the Princes Highway from Winchelsea to Colac.

The submission states that duplication of the Princes Highway is consistent with the *Linking Victoria*, *Princes Highway West A1Corridor Strategy*, which provides strategic justification for duplicating the highway progressively from Waurn Ponds to Winchelsea and ultimately to Colac. The Strategy noted that duplication and a transition to become a dual carriageway road is required between Waurn Ponds and Colac.

#### **Problem assessment summary**

The section of road between Winchelsea and Colac experiences high travel time variability (up to 35% relative to optimum) and average speeds 20km/h to 30km/h below the 100km/h posted speed limit. The current high travel time variability and delays are expected to worsen with forecast traffic growth of 3.5% per year. The lack of overtaking opportunities and poor driver visibility in sections of the road are likely to be contributing to the frequency and severity of crashes, with 32 crashes on the stretch on road in the 5 year period between 2008 and 2012 with three crashes involving fatalities.

The traffic levels on the Winchelsea to Colac section of the Princes Highway are 9,500 vehicles per day in 2013, measured in Colac.

#### **Solution assessment summary**

The submission assessed the following five options:

- Do Nothing;
- Option B: Additional overtaking lanes;
- Option C: Adding one additional land (2+1);
- · Option D: Duplication; and

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• Option E: Adding 4 additional lanes (freeway and grade separation).

The present value of costs exceed the present value of benefits for all 4 options considered (relative to the Do Nothing option). All four options have a BCR of 0.1 or less and a net present cost ranging from \$85 million (Option B) to \$929 million (Option E).

The submission states the preferred option is Option D Duplication. The BCRs for Options B, C and D are either the same or very similar. However, Option D (the preferred option) has a higher net present cost of \$269 million compared to Option B of \$85 million and Option C of \$161 million, because a greater level of expenditure is required.

The submission notes that Option D is preferred over Option B and C because Option B and C will only meet capacity needs in the short term as traffic growth continues to increase.

## **Economic appraisal summary**

The BCR for the preferred option is 0.08:1. The project would impose net costs on the community.

The proponent has noted a number of unquantified benefits, including economic growth due to improved access to Port of Portland and Geelong, tourist traffic increase through the Great Ocean road and agriculture productivity growth including milk production. These are partly quantified in the CBA through measuring travel cost savings for freight traffic, tourist traffic and agricultural traffic.

The economic analysis does not measure improvements in travel time reliability which is an upside risk for the BCR.

# **Deliverability summary**

Infrastructure Australia has not reviewed deliverability in detail.

### **Overall Assessment**

Duplication of the Princes Highway is consistent with the *Linking Victoria*, *Princes Highway West A1Corridor Strategy*. Safety improvements along the Winchelsea and Colac section of the Princes Highway are a significant issue.

The BCR for the project suggests that the benefits of upgrading the Winchelsea and Colac section of the Princes Highway to dual carriage way do not outweigh the costs at this point in time.

#### **Infrastructure Australia Priority List Decision**

Based on the information available, Infrastructure Australia has not included the Princes Highway Duplication Winchelsea to Colac on the Infrastructure Priority List at this time.

Date of assessment: 7 May 2015