

## 2012-2013 Assessment Brief

Recommended Status:	<b>Ready to proceed</b>
Status in 2012 Report to COAG:	<b>Ready to proceed</b>
Initiative Name:	National Managed Motorways Program: Monash Freeway (High Street to Warrigal Road)
Geography:	Victoria
Proponent:	State Government of Victoria
Project description:	
<p>The Victorian Government is seeking \$19.7 million in Commonwealth funding to upgrade the Intelligent Transport System on the Monash Freeway (M1) between High Street and Warrigal Road. This project forms part of the national managed motorways program, which is a better use initiative aimed at improving traffic flows on motorways serving Australia's capital cities.</p> <p><b>Objective:</b></p> <p>The objective of the project is to: improve the operational performance of; increase the effective capacity of; and improve safety on the Monash Freeway. This project aims to provide travellers with a high level, consistent user experience along the freeway. The freeway between High Street and Williamstown Road, to the west, has already been upgraded.</p> <p><b>Problem</b></p> <p>The key problem identified is congestion stemming from high levels of demand on the freeway, stop-start driving conditions and uncontrolled motorway operations. This leads to longer and less predictable journey times, increased operating costs, higher accident rates and increased greenhouse gas emissions.</p> <p><b>Solution</b></p> <p>The proposed solution uses intelligent transport solutions (ITS) comprising information, communication and control systems to manage traffic flows, including motorway entry, lane use and driving speeds.</p> <p>This project involves the upgrade of the Monash Freeway from High Street to Warrigal Road (4.1 kilometres) from the existing Level 1 ITS standard (entry ramp signals) to Level 3 ITS (variable speed limits and lane use management).</p> <p>Variable speed limits and lane use management enable incidents (vehicle break-downs, crashes, lost loads, illegal movements, etcetera) to be managed in an orderly, safe and rapid manner, mitigating delays and enhancing safety through early driver warning, moving traffic into available lanes, and controlling speeds.</p>	
Proponent's capital cost estimate (nominal):	\$19.7 million
Contribution sought by Proponent including requests for project development funding (nominal):	\$19.7 million (Additional funding sought for ongoing maintenance and operating costs of 7.5 per cent per annum of capital cost plus escalation.)
Project timing Start/Completion by Proponent:	2013 - 2015
BCR by proponent, excluding Wider Economic Benefits:	10.5

## Strategic alignment summary

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

Infrastructure Australia has previously recognised the national managed motorways program as a nationally significant initiative.

The objectives of this project are aligned with Infrastructure Australia's strategic priorities to: 'expand Australia's productivity capacity', 'increase Australia's productivity' and 'develop Australia's cities and regions'.

Within the national managed motorways program, individual projects are given rankings, ranging from Merit 1 indicating a high priority, through to Merit 5 or Future Priority. The project rankings are based on a study published in 2011. The Monash Freeway (High Street to Warrigal Road) project has been:

- Assessed as a Merit 2 project; and
- Ranked second among Victoria's projects (the first priority has already been funded).

### Alignment with state strategies:

The Monash Freeway provides a strategic link between the major freight activity area south of Dandenong (with connections to the South Gippsland Freeway and the EastLink Tollway) and the rest of Melbourne including access to the Port of Melbourne and Melbourne Airport. It is also the key strategic link between Melbourne and south east regional Victoria.

SmartRoads, the Network Operating Strategy for Melbourne, designates the Monash Freeway as a Preferred Traffic Route. The freeway's role as a Preferred Traffic Route serves a strategic traffic function, relieving pressure on arterial roads, in particular facilitating key freight movements to the south and east of the city.

## Problem assessment summary

The key problem identified is congestion stemming from high levels of demand on the freeway, stop-start driving conditions and uncontrolled motorway operations. This leads to longer and less predictable journey times, increased operating costs, higher accident rates and increased greenhouse gas emissions.

The proponent has adequately identified current problems facing the Monash Freeway in Melbourne.

## **Solution assessment summary**

The proposed solution is focused on addressing congestion through 'better use' measures. Such measures can avoid, or at least defer, the high costs associated with road capacity expansion solutions. This solution uses intelligent transport solutions comprising information, communication and control systems to manage traffic flows, including motorway entry, lane use and driving speeds.

This project involves the upgrade of the Monash Freeway from High Street to Warrigal Road (4.1 kilometres) from the existing Level 1 Intelligent Transport System (ITS) standard (entry ramp signals) to Level 3 ITS (variable speed limits and lane use management).

Variable speed limits and lane use management enable incidents (for example vehicle break-downs, crashes, lost loads, illegal movements) to be managed in an orderly, safe and rapid manner, mitigating delays and enhancing safety through early driver warning, moving traffic into available lanes, and controlling speeds.

The combined technology enhances safety by maintaining smooth, uncongested flow, thereby providing opportunities for safe merging and weaving, and reducing occasions of sudden braking and speed change.

All baseline ITS has been installed, such as fibre optic communications services, vehicle detection in every lane at approximately 500 metres spacing and at all locations of vehicle entry, variable message signs, closed-circuit television (CCTV), and 24 hour, seven-day-a-week traffic management centre surveillance.

The freeway between High Street and Williamstown Road, to the west, has already been upgraded; this solution would provide a consistent level of ITS for an extended section of the Monash Freeway.

## **BCR appraisal conclusion**

The stated BCR for the project is 10.5.

Infrastructure Australia has been notified of increases in costs in respect of the Victorian Managed Motorways projects. The primary reason for the increase is identified as higher than estimated tender prices and rates for recent road projects in Victoria, indicating increased market rates.

The cost of the High Street to Warrigal Road project is expected to increase from \$15.8 million to \$19.7 million. Additional drivers of the increase in costs for this project are:

- Contingency has been increased to reflect the complexity and accessibility to the site; and
- Allowance for integration with new automated speed cameras which are being installed at High Street by the Department of Justice.

The Victorian Department of Treasury and Finance is working with VicRoads to fully understand the cost drivers from the recent tender process as well as the consequential impact on the BCR, project cost and contingency calculations.

Updated costs and BCRs for this project will be provided once available. The cost increases are not expected to decrease the BCRs of the projects sufficiently to change the existing Infrastructure Priority List recommendations.

## Infrastructure Australia Priority List Recommendation

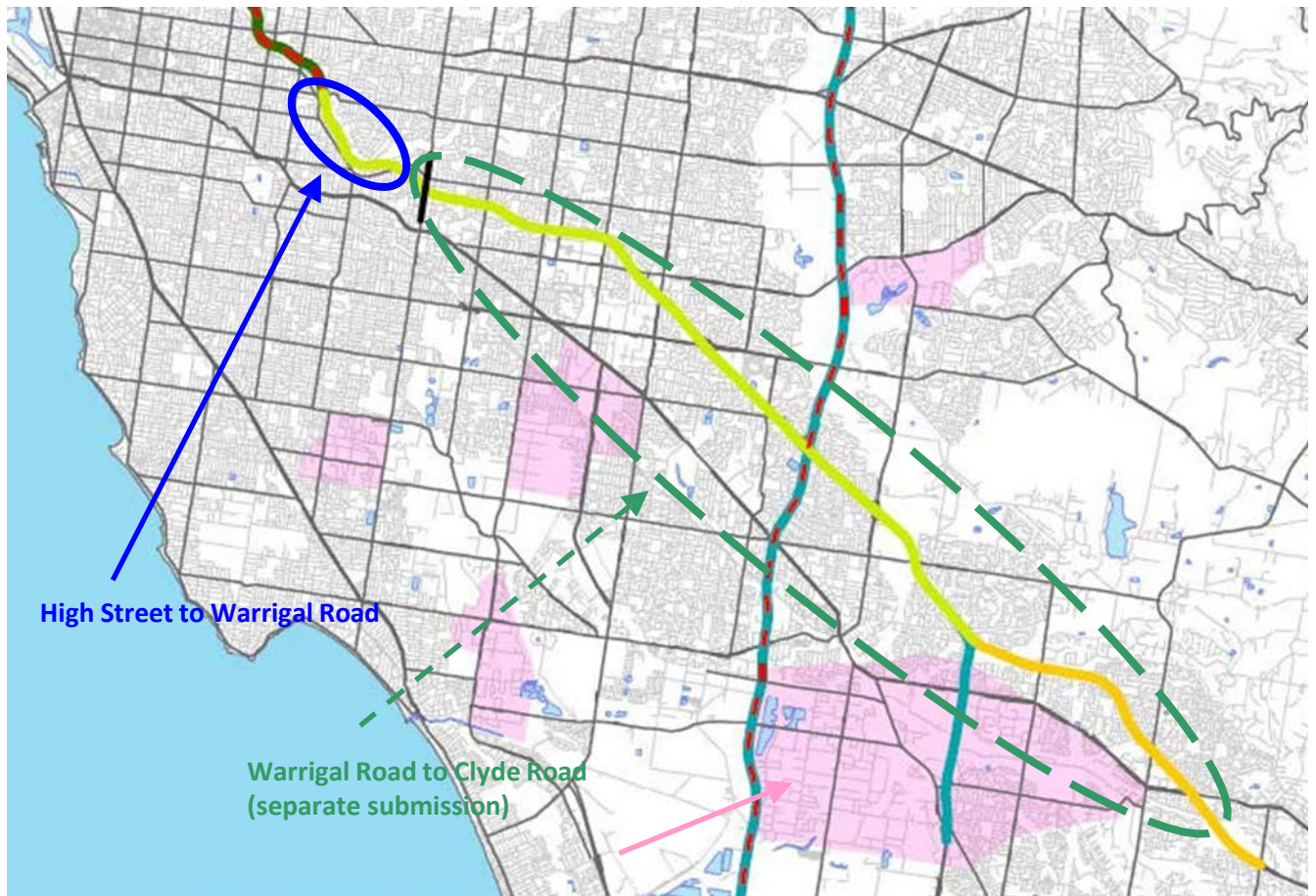
The project is closely aligned with Infrastructure Australia's strategic priority of 'improving productivity' through better use of existing infrastructure assets.

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

- That the proponent, together with the national managed motorways working group, agree to undertake an evaluation of the project:
  - upon completion, for example to test whether the project was completed within scope, on time and on budget; and
  - at agreed future intervals to assess whether demand projections underpinning the project's development were robust, and whether other project benefits have been realised.

Attachments

Figure 1: Monash Freeway – High Street to Warrigal Road



Source: Victorian Government submission 2012. Pink shading represents industrial areas.