# 2010-2011 Project Assessment Brief

<table>
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<th>Current Status:</th>
<th>Ready to Proceed</th>
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| Status in June 2010 Report to COAG: | Queensland – Threshold  
Vic/NSW/SA/WA – Real Potential |
| Initiative Name and IA ID No.: | National Managed Motorways |
| Location (State/Region/City): | The National Managed Motorways Initiative covers South East Queensland, Sydney, Melbourne, Perth and Adelaide. |
| Proponent: | Joint submission: Queensland/Victorian/NSW/South Australian and West Australian governments |
| Project Description: | ‘Managed motorways’ is the term used to describe urban motorways that have intelligent information, communications and control systems incorporated in and alongside the road. The main advantage of these ‘smart’ systems is that they are able to synchronise the flow of vehicles entering a motorway and those already on the motorway, to match its capacity. Evidence shows that this leads to considerable improvements in motorway performance and safety.  
The national managed motorways initiative includes the implementation of an integrated package of intelligent transport system tools. These include coordinated on-ramp signalling, variable speed limits, lane control, incident detection and data loops, travel information and closed circuit television surveillance. Packages are to be developed within a national program approach, along priority sections of urban motorway corridors across Australia.  
The governments of Queensland, Victoria, New South Wales, Western Australia and South Australia have jointly developed the national managed motorway submission in collaboration with Infrastructure Australia, through the National Managed Motorway Working Group.  
The Victorian government has to date not submitted updated detailed template material for leading projects in the program. High level Victorian project information has been submitted to Infrastructure Australia as part of the national prioritisation of projects. |
| Capital Cost by Proponent Outturned ($M): | To be determined. c. $6B |
| Contribution sought by Proponent including requests for project development funding ($M): | To be determined.  
Immediate funding sought for projects in program that are ‘Ready to Proceed’.  
Project development funding is being sought for ‘Threshold’ projects. |
| Start/Completion by Proponent (month/year): | 2011 |

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*This assessment was prepared by the office of the Infrastructure Coordinator in April 2011 for the 2011 Infrastructure Priority List.*
PROFILING

Infrastructure Australia Profiling Assessment Summary:

- **National Significance:** The efficient operation of motorways in Australia’s capital cities is a nationally significant issue. Projects include freight and public transport priority measures on motorway ramps, where appropriate, and the capability of providing freight and public transport priority on the motorways themselves.

- **Alignment with Infrastructure Australia’s strategic priorities:** There is strong alignment with Infrastructure Australia’s strategic priority of improving productivity through better use of existing infrastructure assets, and potentially deferring the need for costly motorway investment and upgrades.

- **Application of Infrastructure Australia’s Reform and Investment Framework:** The project is consistent with principles of key state planning objectives by delivering transport efficiently, managing congestion, delivering safety and security. The projects have been prioritised across jurisdictions on a national basis.

- **Conclusion:** This is a nationally significant initiative, strengthened by consistency with state planning objectives and the Infrastructure Australia strategic priority of improving productivity by ‘better use’ of existing infrastructure.

APPRAISAL

Infrastructure Australia Appraisal Assessment Summary:

- **Depth of supporting information:** Economic appraisal template information was provided for the leading projects within the program. A study comparing and prioritising each project was prepared by an independent consultant and provided as part of the submission.

- **Demand:** Each jurisdiction has made use of state-based strategic traffic models to understand demand without the managed motorways initiative.

- **Capital costs/operating costs:** There is some variation in the capital cost methodology applied for each project in the program. While a number of the project appraisals are based on P90 capital costs, there is some variation in the level of contingency applied, whether costs are P50 or P90, and whether probabilistic cost estimates have been developed. This variation is principally amongst the Queensland projects in the submission. Not all appraisals include operating costs.

- **Quality of economic assessment methodology:** The economic modelling approach for some of the projects is at a high level, built around a number of assumptions including targeted speed. Additional evidence presented since the last submission would suggest that this modelling approach is acceptable, and this has been supplemented with more detailed information being provided on the appropriateness of targeted speed assumptions for projects being put forward in the program. For some projects, benefits have been modelled principally from traffic model outputs as opposed to assuming a target speed, suggesting a robust approach.

- **Conclusion:** Projects have high estimated benefit cost ratios, generally ranging between 3.0 to 10.0 which require further assessment. In instances where benefits could not be estimated principally from traffic model outputs, the submission provides information supporting the underlying speed and other performance assumptions. A number of project cost estimates are at a high level only. There is sufficient information provided to have confidence that the benefit cost ratio for projects in the program are generally comfortably above 1:1.

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### DELIVERABILITY

**Infrastructure Australia Deliverability Assessment Summary:**

This assessment is based on two projects put forward by Queensland as ‘Ready To Proceed’.

**Risk:** The proponent is applying an appropriate risk management framework. The level of information that the risk assessment is based upon is limited in some areas and requires more development before confidence could be assumed in the cost estimates.

**Need for Public/Commonwealth funding:** The rationale for Commonwealth contribution is that the routes are on the Principal Freight Network (as defined by Qld Regional Freight Network Strategy 2007), are likely to form part of any National Freight Network and are part of the National Land Transport Network. Queensland has committed $300M funding to the program. Commonwealth funding will allow acceleration and an increased scope for the program.

**Delivery strategy:** Queensland proposes different procurement strategies for the two ‘ready to proceed’ projects presented (Beams Rd - design then construct; and Rocklea - early contractor involvement followed by design and construct). Given the projects are at an early stage of contingent risk assessment, it would appear prudent to reserve the decision on a preferred contract type.

**Governance:** The submission proposes that the National Managed Motorways Group (comprising state road agencies and Infrastructure Australia) will continue to pursue collaboration and information sharing and progress the national program. Formalisation of these arrangements is desirable.

**Conclusion:** For projects to proceed to an assessment by Infrastructure Australia as ‘Ready to Proceed’, continued detailed development of risk management, cost estimate, delivery strategy and governance arrangements is desirable.

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OVERALL RECOMMENDATION

**Infrastructure Australia Priority List Recommendation:**

There is sufficient project development to recommend the national managed motorways program as ‘ready to proceed’, particularly leading projects in the program from the Victorian and Queensland governments, as well as project development funding for the NSW and WA parts of the program. This recommendation is conditional on the following:

- The state jurisdictions and the Commonwealth are to:
  - Agree a charter for the National Managed Motorways Working Group;
  - Develop a proposal for the application of feasibility/project development funding to project within the program; and
  - Complete project development work to a stage where a high level of confidence can be assumed that each priority project will deliver the proposed benefits within the budget and schedule, eg individual business cases progressed to investment decision-making stage.

- The relevant jurisdiction agreeing to undertake an agreed post-completion evaluation of the project:
  - Upon completion (e.g. to test whether the project was completed within scope, on time and on budget); and
  - At agreed future intervals, to assess whether traffic projections underpinning the project’s development were robust, and whether other project benefits have been realised.

Recommendations by Infrastructure Australia on whether specific projects within the program are ‘ready to proceed’ will depend on further assessment (currently being undertaken).

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ATTACHMENT

Figure 1 Managed Motorways Program in South East Queensland

This assessment was prepared by the office of the Infrastructure Coordinator in April 2011 for the 2011 Infrastructure Priority List.
Figure 2 Managed Motorways Program in Victoria

This assessment was prepared by the office of the Infrastructure Coordinator in April 2011 for the 2011 Infrastructure Priority List.
Figure 3 Managed Motorways Program in New South Wales

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Figure 4 Managed Motorways Program in Western Australia

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