



Australian Government

Infrastructure Australia

Outline of *Infrastructure Australia's* Prioritisation Methodology

Appendix F M4 Extension Project (Both Stage 1 and Stage2)

Appendix F – Further inputs for Initiative Selection

Part A - Overview

Title of Initiative – M4 EXTENSION

Summary of Initiative –

Stage 1 of the preferred option for the M4 Extension comprises the following:

- widening of the existing M4 Motorway from west of Church Street at Merrylands to Concord Road at North Strathfield from three to four lanes each way; and
- construction of two uni-directional three lane capacity motorway tunnels (approximately 8.5km in length) with a design and signposted speed of 80 km/hr tunnel from North Strathfield to Parramatta Road at Broadway. Ramp connections would be provided from the motorway tunnels to:
 - Parramatta Road, Haberfield (bus only);
 - City West Link Road at Rozelle to provide access to the ANZAC bridge; and
 - Parramatta Road at Glebe and Broadway and Abercrombie Street at Chippendale.

Stage 2 of the preferred option for the M4 Extension comprises the following:

- construction of two uni-directional three lane capacity motorway tunnels (approximately 3km in length) with a design and signposted speed of 80 km/hr from Parramatta Road in Camperdown to just south of Campbell Road at St Peters;
- one or more road transport links would be constructed from just south of Campbell Road, St Peters to the arterial road network around Sydney Airport; and
- construction of two uni-directional two lane capacity northern motorway tunnels (approximately 4km in length) with a design and signposted speed of 80 km/hr connecting Victoria Road near the Gladesville Bridge to the main M4 Motorway tunnel in the Leichhardt area.

Part B – Response

Complete the following table. In doing so, ensure that all sources of data and information are adequately referenced

Item	Response
Deliverability including:	

<p>Readiness,</p> <p>Complexity (Delivery)</p>	<p>Considerable planning, preliminary design and feasibility study work has been completed for the project. The environmental assessment process for the project could commence in February/March, 2009. The estimated cost to further develop the project in 2009/10 is up to \$20M for project development costs, excluding land acquisition costs. The completion of development work in 2009/10 will progress the project to the stage where the procurement process could be commenced.</p> <p>Both stages of the project may be delivered as a PPP, with a government contribution. Examples of projects with similar technical, procurement and construction challenges that have been delivered successfully, include:</p> <ul style="list-style-type: none"> • Eastern distributor; • Cross City tunnel • Lane Cove tunnel; <p>Stage One of the project would be in financial terms, the largest road transport project ever constructed in Australia. It is of a similar scale to the Brisbane Airportlink project, and is therefore considered within the capability of the Australian construction industry.</p> <p>Considerable design and constructability feasibility work has been completed to assess the project as technically feasible. Refer to the draft Preliminary Project Definition Report for the full project.</p>
<p>Feasibility (Technical)</p>	<p>This project could be delivered as a PPP with a substantial government contribution. Alternatively Government could choose to fund it 100%. Financial analysis for a range of project scope options has been undertaken to assess the government contribution required for various tolling arrangements, with and without private sector financing. The outcomes of this analysis for the following three options is considered relevant:</p> <ul style="list-style-type: none"> • The full M4 Extension project scope without staging; • Stage 1; and • Stage 1 and Stage 2, that is, the full project scope but constructed in a staged sequence. For the purposes of the analysis, it was assumed that construction of the Stage 2 project would commence five years after the Stage 1 project was opened to traffic. <p>In view of the high capital cost for the project, primarily due to the high cost of large scale tunnelling, a significant government contribution is required in all cases where a tolled PPP delivery has been considered.</p>
<p>Affordability (ownership structure, funding sources)</p>	

There are a number of issues that require consideration when assessing a motorway project's suitability for the imposition of a toll. Three significant financial issues for this project are:

- The proposed M4 Extension connects with the existing Lapstone (near Penrith) to North Strathfield M4 corridor. The existing M4 tolling arrangement is currently managed under concession until 2010. The existing toll road also has a cashback scheme whereby private users of the toll road are reimbursed their tolls via a claims system. The current stated NSW Government policy is to remove the toll at the completion of the concession. The M4 Extension project includes the widening of the existing M4 from west of Church Street at Merrylands to Concord Road at North Strathfield generally from three to four lanes each way. Whilst, no decision has been made on whether this section of the upgraded M4 will be tolled, the financial analysis for the project has been undertaken on the assumption that it will be tolled. The contribution to project revenue from tolls for the widened M4 from Merrylands to North Strathfield is substantial, representing approximately half of the toll revenue to be collected for the full scope project. It has also been assumed that no cashback scheme would be reintroduced.
- Principal sections of the freight routes between Western Sydney and the Port and the Airport include the M5/M5East and M4. The M5 East is currently not tolled. If a toll was to be imposed on the M4 and M4 Extension for heavy vehicles, it is likely that a significant proportion of heavy vehicles travelling either to or from the Port or Airport would take an alternative route comprising the M4, Centenary Drive, Roberts Road, King Georges Road and the M5 East. A toll on the M5 East would be necessary for heavy vehicles to bring into balance the relative costs of the two routes. This truck toll on the M5East has been assumed in the financial model.
- The net toll revenue of the Sydney Orbital motorway network is estimated to be \$875m (after cashback). Further analysis of the toll rates is discussed below.

PPP Financial Model

Acceptability (public/
government/industry)

In relation to Federal Government acceptance, the project was identified in the Auslink strategy document, "Sydney Urban Corridor Strategy", (2007) as a short term strategic priority.

The project forms part of a number of state strategies and policies. Refer appendix C.

The private sector has indicated strong interest in the project.

It is anticipated that there would be broad user support for this project as is the case for other links in Sydney's motorway network. The imposition of a toll may discourage some potential users of the motorway who do not perceive that the travel time saving to equal or exceed the cost of the toll. The extent of toll avoidance is directly related to the cost and convenience of alternative routes.

Community consultation was previously undertaken in 2003 on potential route options for the M4 East, which include part of the proposed stage 1 of the M4 Extension. Across the consultation area, there was particular interest in the environmental aspects of the project, including the real and perceived aspects of air quality, heritage and traffic impacts.

A comprehensive community consultation and stakeholder engagement strategy will be prepared and implemented for the project as part of the further development of the project, and environmental assessment.

Staging

A staging feasibility study is in progress. If staged, the preliminary preferred staging solution for the project comprises two stages, as described elsewhere in Appendix C.

The staging scenarios evaluated have assumed that construction of Stage 2 would commence 5 years after completion of Stage 1.

NSW, through RTA, has delivered eight significant road infrastructure projects, through PPP procurement agreements over the past 20 years. This achievement demonstrates a proven capability, contractual maturity and experience which will be critical to the successful governance of this initiative if PPP finance is to be used.

It should be noted that PPP delivery policies in NSW are constantly being reviewed and improved to incorporate lessons learned on previous projects and in response to construction industry feedback, public submissions and current financial market conditions.

Governance model

