2010-2011 Project Assessment Brief

<table>
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<tr>
<th>Current Status:</th>
<th>Threshold</th>
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<td>Status in June 2010 Report to COAG:</td>
<td>Threshold</td>
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<tr>
<td>Initiative Name and IA ID No.:</td>
<td>Eastern Busway Stages 2b and 3 (10-010-10)</td>
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<tr>
<td>Location (State/Region/City):</td>
<td>Queensland, Brisbane, Eastern Corridor</td>
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<td>Proponent:</td>
<td>Queensland Department of Transport and Main Roads</td>
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**Project Description:**

The Eastern Busway is a proposed 20km two lane, two way dedicated busway between the University of Queensland and Capalaba. It aims to separate buses from general traffic to give bus passengers a congestion-free run on fast, frequent and reliable services. Stage 1 (nearest the CBD) was completed in 2009 and Stage 2a is under construction. This submission relates to Stages 2b and 3.

Stage 2 involves a fully segregated busway from the South East Busway at Buranda to Bennetts Road, Coorparoo, constructed in two sub stages:

- 2a – South East Busway, Buranda to Main Avenue, Coorparoo – under construction and due for completion by early 2012 ($466M); and
- 2b – Main Avenue, Coorparoo to Bennetts Road, Coorparoo (Coorparoo Junction) ($685M)

A number of options were included in information provided to Infrastructure Australia in the 2008 submission for this part of the Busway, including:

- Option 1 – a fully segregated busway (including limited tunneling) except for the section between Baragoola Street and Macaulay Street; and
- Option 4 (preferred option) – a fully segregated busway, including a tunnel between Main Avenue and Coorparoo Junction. (Maps attached)

Stage 3 involves development of transit lanes from Scrub Road, Carindale to Tilley Road, Chandler.

The Queensland Government’s preferred option for Stage 2b in the 2010-11 submission continues to be Option 4, which has a claimed benefit cost ratio of 1.04. Option 1 has a lower capital cost and a claimed benefit cost ratio of 1.35, but was not preferred because it was not seen as a long term solution (given the Government’s projections of traffic growth in the corridor).

The Queensland Government has indicated further work is being undertaken to examine staging and sequencing of Eastern Busway to achieve the highest benefits for the corridor. Further work is also underway on strategies for transit oriented development along the corridor. Infrastructure Australia received the documentation for the recently released Coorparoo Junction Transit Orientated Development expression of interest, which includes a mixed use development and provision for a busway station in the currently unfunded section of busway at Coorparoo.

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<th>Capital Cost by Proponent Outturned (SM):</th>
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<td>$825M comprised of:</td>
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<tr>
<td>• Stage 2b $685M</td>
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<td>• Stage 3 $140M</td>
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This assessment was prepared by the Office of the Infrastructure Coordinator in April 2011 for the 2011 Infrastructure Priority List.
Infrastructure Australia Profiling Assessment Summary:

- **National Significance:** Improving public transport in a major corridor in Australia’s third largest city is nationally significant. Further development of transit oriented development plans along the corridor, and other initiatives to better utilise existing infrastructure, would reinforce the case.

- **Alignment with Infrastructure Australia’s strategic priorities:** The project potentially aligns well with the priorities of ‘Developing our Cities and Regions’, ‘Reducing Greenhouse Emissions’, ‘Improving Social Equity’ and, less strongly, with priorities relating to economic development.

- **Application of Infrastructure Australia’s Reform and Investment Framework:** The problem of congestion on the existing bus route is reasonably well made. The case for the proponent’s preferred option needs to be strengthened against the framework. Consideration of alternative options such as demand management and pricing to deal with the stated problem of road congestion should also be considered.

- **Conclusion:** The proposal aligns well with Infrastructure Australia’s strategic priorities and is nationally significant. In response to the Office of the Infrastructure Coordinator’s concerns on the preferred option presented in the submission, further staging and sequencing, cost estimates, traffic modelling and economic analysis work is being undertaken by the Queensland Government for the Eastern Busway corridor. The results of this work are to be provided to Infrastructure Australia in late 2011.

Infrastructure Australia Appraisal Assessment Summary:

- **Depth of supporting information:** The economic appraisal has not been updated since the original submission to Infrastructure Australia in 2008-09, with the exception of indexing values to current prices.

  The appraisal covers the whole of Stage 2. Now that Stage 2a is under construction, a separate economic analysis should be provided for Stage 2b only. The cost benefit analysis for Stage 3 also needs updating to take into account recent developments in the corridor. It is also expected that the scope of the analysis would be updated to reflect the additional work the proponent is now undertaking for the Eastern Busway corridor.

- **Demand:** The economic analysis for Stage 2 is supported by comprehensive independent third party demand, economic and engineering reports. Demand modelling was undertaken using the Government’s Brisbane Strategic Transport Model. The adoption of a ‘do-nothing’ base case could be considered a little unrealistic with significant deterioration in travel times, operating cost and reliability evident in the later stages of the modelling. The demand estimates are currently being updated and will be presented to Infrastructure Australia in late 2011.
• *Capital costs/operating costs:* Capital costs used within the appraisal remain unchanged in the updated submission. The updated submission states the “capital cost is based on a best estimate of cost (P50) with an added allowance for planned risk which is estimated to be small, with a total cost therefore approximating to a P50 cost estimate” (pg 18). Moving to a P90 estimate for capital costs is likely to reduce the reported benefit cost ratio for the proponent’s preferred option to below 1:1.

• *Quality of economic assessment methodology:* The economic assessment framework is conventional and complies with cost benefit guidelines, except for capital costs as noted.

• *Conclusion:* The reported benefit cost ratio for the currently preferred Stage 2b option is only slightly above 1:1, and is based on a P50 capital cost estimate. The use of a P90 capital cost estimate has been sought in order to comply with the Infrastructure Australia appraisal framework and to enable comparison with other projects presented to Infrastructure Australia. However, this is likely to reduce the reported benefit cost ratio for the project to below 1.0. Further investigation of staging and sequencing is being undertaken by the Queensland Government. Lower cost options for stage 2b should be investigated.

**DELIVERABILITY**

**Infrastructure Australia Deliverability Assessment Summary:**

• An update of deliverability-related information has been provided in the 2010-11 submission. Key supporting information, including a risk register, concept design, impact management plan, cost estimate and governance framework was not updated. In some areas, the project is at an advanced stage of development so further development of this work is required before confidence in the deliverability of this proposal could be given. The Queensland Government advises that further work is being undertaken and will be provided to Infrastructure Australia later in 2011.

**OVERALL RECOMMENDATION**

**Infrastructure Australia Priority List Recommendation:**

• It is recommended that the initiative remain in the Infrastructure priority list as a ‘Threshold’ project. The Queensland Government is undertaking further project development work, and has indicated this material will be provided to Infrastructure Australia later in 2011.

This assessment was prepared by the Office of the Infrastructure Coordinator in April 2011 for the 2011 Infrastructure Priority List.
Context for Eastern Busway Proposal

This assessment was prepared by the Office of the Infrastructure Coordinator in April 2011 for the 2011 Infrastructure Priority List.
Eastern Busway Stage 2b – Main Avenue to Bennetts Road*

*Stage 2b – Option 1 includes a combination of tunnel and surface road (surface road running between Baragoola Street and Macaulay Street). Option 4 (the preferred Queensland solution) is more expensive because it involves more tunneling including through the Baragoola Street and Macaulay Street section of stage 2b.

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