

## 2012-2013 Assessment Brief

<b>Recommended rating:</b>	<b>Threshold</b>
<b>Status in 2012 report to COAG:</b>	<b>New Submission</b>
Initiative Name:	East-West Bus Corridor
Geography:	Greater Adelaide Region, South Australia
Proponent:	Department of Planning, Transport and Infrastructure, South Australian Government
Project description:	
<p>The South Australian Government is seeking \$174.3 million in Commonwealth funding for a package of bus priority measures, transit zones and interchange upgrades on the East-West Bus Corridor in Adelaide.</p> <p><b>Objective:</b></p> <p>The objective of the project is to improve the efficiency and service quality of existing bus services on the east-west (including the north-east) mass transit corridor. In doing so, the project aims to increase public transport patronage and contribute towards achieving the State goal to increase the use of public transport to 10 per cent of metropolitan weekday passenger vehicle kilometres.</p> <p><b>Problem:</b></p> <p>Congestion on the east-west bus corridor is impacting the performance of public transport across Adelaide, leading to increased transit times, reduced reliability and quality of the service for buses. This limits the attractiveness of public transport as a travel mode for journeys of less than 10 kilometres and does not provide service levels required to attract commuters from private cars. The problem is expected to worsen as the population grows.</p> <p>The problem impacts regular bus services as well as bus rapid transit services (O-Bahn) that connect to the east-west corridor.</p> <p><b>Solution:</b></p> <p>The preferred option is to enhance the bus services by providing bus priority measures along the existing road corridors, bus priority infrastructure at intersections, and upgrades to eight identified stops/interchanges to improve amenity and ticketing efficiency. The east-west corridor serves Adelaide's east, west and north-east areas.</p>	
Proponent's capital cost estimate (nominal):	\$350 million
Contribution sought by Proponent including requests for project development funding (nominal):	\$174.3 million
Project timing Start/Completion by Proponent:	2014-2018
BCR stated by proponent:	1.7

## Strategic alignment summary

### Alignment with Infrastructure Australia's strategic priorities:

The submission strongly aligns with Infrastructure Australia's strategic priorities. Ensuring the efficient operation of the public transport system in Adelaide is likely to both 'expand productive capacity' and 'increase productivity' by enabling more people to travel efficiently to work. The provision of bus priority measures also supports the priority of 'developing our cities and regions' by providing transport infrastructure that enables efficient travel.

The submission aligns with Infrastructure Australia's theme of 'transforming our cities'.

### Alignment with state strategies:

The objective of improving reliability and journey times for buses on the east-west bus corridor aligns closely with key state government strategies such as South Australia's Strategic Plan and The 30 Year Plan for Greater Adelaide.

The objectives of the submission are aligned with several principals identified in the 30 Year Plan for Greater Adelaide. These include 'developing a compact and carbon-efficient City', 'accessibility' and 'a transit-focused and connected City'.

The submission supports goals of the South Australian Strategic Plan that relate to urban spaces, road safety and public transport. The submission clearly outlines the direct alignment between the goals and the proposed bus corridor. For example, the submission identifies that providing attractive public transport will remove cars from the road, thereby improving road safety.

The submission also aligns with the state goal to increase the use of public transport to 10 percent of metropolitan weekday passenger vehicle kilometres.

## Problem assessment summary

The core problem identified is a lack of measures to protect public transport from the impacts of road congestion, limiting public transport patronage. At the same time, 'cheap and plentiful parking' combined with faster travel by car creates few signals to discourage private cars as an attractive transport option for many commuters to the CBD. Congestion that impacts buses leads to increased transit times, reduced reliability and quality of the service. This will most likely reduce patronage of public transport services over time and will be compounded by population growth.

Supporting data is provided showing the average speed of public transport bus services halves from 50 to 25 kilometres per hour due to congestion during the morning peak period. Furthermore, travel time variability increases from 10 to 50 per cent between 7:30am and 9:30 am due to congestion.

Congestion on the main city streets used for bus services combined with increases in the public transport fleet compounds the problem. The submission states that the main city streets used for bus services are at capacity with the current 345 bus services accessing main streets in the morning peak hour and planned increases to 395 services by 2021. The submission notes that this gives rise to traffic management issues and increases the layover times at the main stops.

## Solution assessment summary

The preferred option is to provide bus priority measures along the existing road corridors, bus priority infrastructure at intersections and upgrades to eight identified stops/interchanges to improve amenity and ticketing efficiency.

A range of solutions are identified to address the problem including reform options (such as painted bus lanes and traffic light signalling priority changes) and infrastructure options (separated bus lanes and additional lanes for buses).

Whilst the identified solution is a reasonable response to the problem in the short term, further reform measures (for example, reform to car parking charges) and better use of infrastructure should be considered.

## BCR appraisal conclusion

The BCR included in the business case is 1.7. The BCR is based on the proponent's preferred option. A review of the BCR indicates that it is most likely slightly overstated. Although the BCR is greater than 1.0, some of the assumptions underlying the BCR calculation need to be more clearly justified.

Additionally, BCRs have not been provided for the lower capital cost options. More information on the BCR of these options is needed.

## Infrastructure Australia Priority List recommendation

The Office of the Infrastructure Coordinator supports measures to enhance public transport services in Adelaide and contribute to the states public transport patronage target. The submission provides a clear description of why the performance of the bus network is constrained by congestion caused by private vehicle use.

It is recommended that the project be included on the Infrastructure Priority List at **Threshold** with the following conditions:

- The proponent provides further economic analysis including information on:
  - Car/truck travel time and operating cost impact from reduced road capacity;
  - Base case assumptions, in particular the number of bus services per year;
  - Bus purchase and maintenance expenditure;
  - Residual value calculation methodology; and
- The proponent considers non-infrastructure measures such as increases to the car parking levy.

It is recommended that the project be nominated for project development funding.

# Attachments

## Figure 1: The Eastern and Western Public Transport Catchments of Adelaide

Map 1 - The Eastern and Western Public Transport Catchments of Adelaide

