

Cross-City Tunnel, Sydney, Australia

Full Description

Project Summary:

Background

To ease congestion in the Sydney Central Business District (CBD), the Roads and Traffic Authority of New South Wales (NSW) planned to build a crosscity tunnel (CCT) – a 2.1 km twin two-lane motorway running east and west beneath the Sydney CBD. The estimated total project cost was as high as AUD 1.050 billion (USD 712.7 million). Due to the high cost, the NSW authority decided to pursue a PPP to deliver the project.

Project Structure

In October 2000, a total of eight consortia expressed interest in bidding for the project. Of the eight, three were shortlisted, leading to the selection of Cross City Motorway Pty. Ltd. (CCM), a consortium comprising Bilfinger Berger AG, Baulderstone Hornibrook Pty Limited, and Deutsche Bank AG, as the winner in 2002. CCM was selected due to its innovative design, more aggressive traffic forecast, and willingness to provide an upfront payment of around AUD 100 million (USD 68 million) to the NSW state government. Per the proposal submitted by CCM, the project would be delivered at no cost to the government.

The consortium was responsible for financing, designing, building, operating, and maintaining the CCT. The state government bore the native title risks, force majeure, uninsurable risks, and legislative and government policy risks. Meanwhile, the consortium bore the design, construction and commissioning risks, delay and completion risks, demand risks, ground/geotechnical condition risks, and operation and maintenance/facility management risks.

Based on CCM's high traffic estimation, around 86,000 to 90,000 vehicles per day, the project attracted both local and international financiers. Debt was provided by Deutsche Bank, Westpac Banking Corporation, and other syndicated debt financiers; while equity was provided by CKI Tunnel Investment (Malaysian) Ltd (50%), Bilfinger Berger BOT GmbH (20%), SAS Trustee Corporation (12.5%), JP Morgan Nominees Australia Ltd (10%), PSS Board (3.75%), and CSS Board (3.75%). It was expected that toll fees would recover the costs of design, construction, and maintenance of the CCT.

Lessons Learned

Construction started in January 2003 and the CCT officially opened to the public in August 2005. It was the first motorway in Sydney to have full electronic tolling. However, the toll was set very high, at around AUD 3.56 (USD 2.42) each way, which was the highest per km of any toll in Sydney. Owing likely in part to the high fee, the actual traffic was only around 30,000 vehicles per day – less than half of the forecasted amount.

At the same time, the government elected to close off the surface roads to benefit from the presumed reduction in traffic on the surface that would result from the opening of the tunnel. These roads were meant to be set aside for use by pedestrians, public transport, and cyclists. However, the closure of the surface roads caused public controversy. Public opinion regarded the closure of the surface roads as a scheme to 'funnel' traffic to the CCT, to ensure the financial viability of the project, rather than as a decision made purely for traffic planning purposes. The private consortium sought compensation from the government or a toll subsidy, but the government declined. A public argument in the media between the private consortium and the government exacerbated the situation. Less than two years after opening the tunnel, the private consortium went into bankruptcy, with outstanding debts of AUD 560 million (USD 380 million).

The government then sold the project to ABN Amro and Leighton contractors in 2007 for a sale price of AUD 700 million (USD 475 million). The original creditor banks were all paid in full and the equity investors received their expected return due to the high selling price. Currently, the tunnel is privately owned and operated and will be returned to the NSW state government in 2030.

The project provides several lessons learned:

- Rational pricing, taking into account the willingness and ability of end-users to pay, is essential where a project is expected to be entirely funded by user fees. Setting prices too high in order to make the project appear “free,” that is with no public subsidy or other fiscal support, can negatively impact demand, impairing the viability of the project, and lead to a public backlash.
- Be mindful of optimism bias in demand forecasts, especially when demand is difficult to guarantee, as in the case of a toll road with free alternative routes.
- PPP is first and foremost a “partnership.” When problems arise, the public and private partner need to be open to discussing in good faith all possible means of mitigating the damage. Working together or agreeing on mediation is much more likely to deliver a positive outcome for both parties than a public argument. In this case, the rumors regarding the surface road closures and the public disagreement between the private consortium and the government may have created some political embarrassment for the NSW state government.
- Relatedly, the public partner should have an appropriate communications strategy in place to manage public perception of the project. Ultimately, the public partner is responsible for ensuring public support for the PPP and realizes the full benefit of the project only if users and the broader population view the project positively.¹

Footnote 1: Case source(s): <https://www.carecprogram.org/uploads/3-PPPs-in-Australia.pdf> Accessed on June 4, 2019.

<https://www.hkis.org.hk/ufiles/2008-apcchan.pdf> Accessed on June 4, 2019.

http://www.omegacentre.bartlett.ucl.ac.uk/wp-content/uploads/2014/12/AUS_SYDNEY_PROFILE.pdf Accessed on June 4, 2019.

https://www.treasury.nsw.gov.au/sites/default/files/2017-02/Cross_City_Tunnel_contracts_summary_2008_update_lowres.pdf Accessed on August 16, 2019.

<https://www.parliament.nsw.gov.au/lcdocs/submissions/45268/Sub%2072%20Quiggan.pdf> Accessed on August 6, 2019.

<https://www.oecd.org/gov/budgeting/45039865.pdf> Accessed on August 6, 2019.

https://books.google.co.id/books?id=60mkCgAAQBAJ&pg=PA77&lpg=PA77&dq=lessons+learned+sydney+crosscity+tunnel&source=bl&ots=X9_YRSkH0o&sig=ACfU3U277JLPBYkkTqDYJEZZwGbbgsl3OQ&hl=en&sa=X&ved=2ahUKEwjJyuDfx-PjAhX36nMBHfJFBVYQ6AEwGXoECAoQAQ#v=onepage&q=lessons%20learned%20sydney%20crosscity%20tunnel&f=false Accessed on August 6, 2019.

Related Content

[Select WBG PPP Toolkits](#)

Additional Resources

The [Guidelines on Innovative Revenues for Infrastructure \(IRI\)](#) is intended to be a living document and will be reviewed at regular intervals. They have not been prepared with any specific transaction in mind and are meant to serve only as general guidance. It is therefore critical that the Guidelines be reviewed and adapted for specific transactions.

To find more, visit the [Innovative Revenues for Infrastructure](#) section and the [Content Outline](#), or [Download the Full Report](#). For [feedback](#) on the content of this section of the website or suggestions for links or materials that could be included, please contact the Public-Private Partnership Resource Center at ppp@worldbank.org.

