

Cost benefit analysis of the Centenary Bridge Project

Analysing the costs and benefits of bridge investments



LOCATION

Queensland

CLIENT

Department of Transport and Main Roads

COST-BENEFIT ANALYSIS

TRANSPORT ECONOMICS

Background

Originally constructed as a two-lane arterial road, the Centenary Motorway has not kept pace with increasing demand and contemporary design standards. [A key component of the Motorway is the Centenary Bridge](#). Investment is required to maintain the existing structure due to the high traffic volumes, particularly in peak periods.

This part of the network is operating near capacity in peak periods, with forecast demand exceeding this capacity in the near future. Left unaddressed, travel times will continue to increase, and the integrity of the bridge structure may diminish.

Our role

NineSquared was engaged to undertake a Cost Benefit Analysis at both the Preliminary Evaluation and Business Case stages. This analysis was undertaken in a short timeframe to meet Government requirements, with the analysis being reviewed by the Department of Transport and Main Roads, Building Queensland and Infrastructure Australia.

The Cost Benefit Analysis valued the impacts of travel time, vehicle operating costs, safety and externalities such as emissions against the cost of provision. Whole-of-life cost considerations were taken into account for both the existing structure and each of the proposed solutions.

A key driver for the success of this project was the cross-disciplinary approach taken at the start of the engagement. NineSquared was involved in project decision making from the beginning of the process in partnership with the risk advisors, cost estimators, project engineers, bridge designers and key Government stakeholders.

NineSquared was originally engaged to evaluate various project options at the preliminary evaluation stage. As a result of this work, two preferred options were identified and recommended to advance to

the business case phase. The business case was undertaken by the Department of Transport and Main Roads in conjunction with Building Queensland, with the final business case documented on the Building Queensland website. This engagement was subject to peer review, gateway review and review by Infrastructure Australia. A summary of the business case cost-benefit analysis can be [downloaded here](#).

FOR FURTHER INFORMATION

For more information, find one of our experts at ninesquared.com.au/people