

Projects

Carnarvon Gorge Cost Benefit Analysis

Economic contribution assessment and cost-benefit analysis of a road project



LOCATION

CLIENT

Brisbane, QLD

Central Highlands Regional Council & AECOM

TRANSPORT ECONOMICS

COST-BENEFIT ANALYSIS

Background

The Central Highlands Regional Council was seeking funding to support the proposed sealing (paving) of 15km of Carnarvon Gorge Road to improve the road's safety and flood immunity, and bolster tourism potential.

The Carnarvon Gorge Road is a Local Road of Regional Significance and is the lone access to Carnarvon Gorge, a significant natural feature and major tourist attraction. Carnarvon Gorge is one of Queensland's premier nature-based attractions, with an estimated 65,000 visitors per annum. Supporting two major accommodation establishments, and a variety of other businesses including helicopter tours, walking tours, and sunset entertainment the Gorge is an important part of the local economy.

The last 15km of the road is unsealed, with a poor alignment and narrow width. The current alignment raises a safety concern. There are four floodways including Carnarvon Creek which has a tendency to rise quickly, cause localised flooding and road closures. During the wet season, local residents have difficulties travelling to work or home due to unexpected flooding. Some tourists avoid the area in wet season due to the risk of flood related road closures, which limits economic activity within the region through this period.

Our role

NineSquared's role on the project was to undertake an economic evaluation of the project to support submissions for funding. This involves two separate economic analyses to provide a well-rounded understanding of the potential impacts of the project.

An economic contribution was undertaken using NineSquared's Regional Input-Output Model. This model estimated the contribution of the project on the local economy. Tourism expenditure was included based on the expected increase in tourist activity to Carnarvon Gorge. The initial impact of the

projects construction was also captured. Flow-on impacts throughout the regional economy were also estimated, including the impact to Gross Regional Product and local employment.

A cost-benefit analysis was also undertaken to help inform the investment decision. This analysis focused on the direct benefit of the project with respect to the reduction in road user costs. Consideration was required as to the impact of road closures on potential road users and their decision making on whether to wait out a closure or cancel their trip. Similarly, the increase in tourism traffic needed to be considered within the CBA framework.

Both analyses were documented in a standalone economic analysis report. This report commented on the findings individually, then provided a suite of recommendations and considerations when considering both analyses together.

The project was successfully funded and announced by the Queensland Government in December 2015 under the "Royalties for Resource Producing Communities Fund".

FOR FURTHER INFORMATION

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

