

Projects

Adelaide East-West Bikeway Project

Cost Benefit Analysis for Active Transport



LOCATION

Adelaide

CLIENT

City of Adelaide

COST-BENEFIT ANALYSIS

Background

When the City of Adelaide needed to understand the economic impacts of developing the East-West Bikeway, it turned to NineSquared to conduct a comprehensive cost-benefit analysis.

Our role

The City of Adelaide engaged NineSquared to undertake an economic analysis of the proposed East-West Bikeway (EWB) project. This initiative aimed to create a separated bikeway corridor that would accommodate bike traffic entering the Central Business District (CBD), thereby improving cycling infrastructure and promoting active transportation. The project aligns with various policy and strategy documents, including the City of Adelaide's Transport and Movement Strategy 2012-22, the City of Adelaide 2020-24 Strategic Plan, and the Carbon Neutral Adelaide Action Plan 2016-21.

NineSquared's economic appraisal brought together elements of the entire project, such as engineering and cost estimates, and placed them within an economic context. The benefits of the project were monetised using widely accepted methods recognised as leading practice, including guidelines from Australia Transport Assessment and Planning (ATAP), the NZ Transport Agency Monetised Benefits and Cost Manual, and the Infrastructure Australia Assessment framework.

The analysis identified several key benefits of the bikeway project, including impacts on health due to changes in active travel provisions, congestion reduction, improved road safety, reduced vehicle operating costs, decreased noise pollution, and travel time savings.

Headline results including benefit-cost ratio (BCR), net present value (NPV), internal rate of return (IRR) and first-year rate of return (FYRR) were calculated. The sensitivity analysis conducted by NineSquared demonstrated the robustness of the economic analysis results under various scenarios. Scenario analysis was also conducted to provide decision makers with sufficient information to inform an investment decision.

Qualitative impacts were also assessed, revealing several positive outcomes such as improved access to education, enhanced liveability, greater social interaction, and increased enjoyment of cycling. Negative impacts, such as potential traffic disruptions and health impacts from electric personal mobility devices substituting active travel, were also highlighted along with potential mitigation strategies.

FOR FURTHER INFORMATION

To learn more about how NineSquared can help your organization achieve its goals through expert economic consulting and commercial advisory services, visit our website at www.ninesquared.com.au