

Problem Description

Question	Response
<p>Description of the problem and purpose of the proposed research</p>	<p>The Future Transport Strategy 2056 has a strong emphasis on encouraging active transport. For example, the <u>'Movement and Place Framework'</u> which underpins the Strategy emphasises the need to access 'successful places' through active transport. To achieve this, however, the infrastructure projects that provide active transport may require different, and less-traditional, cost-benefit analysis (CBA) approaches. For example, intangible benefits are often not formally recognised in business cases or in CBA for new active transport infrastructure projects. This can result in unfavourable or undervalued appraisals of these projects and a hesitation toward future investment.</p> <p>This research is designed to examine how other jurisdictions around the world are incorporating active transport benefits into business cases and CBAs to inform decision-making regarding infrastructure. Ideally, this research will identify the emerging best-practice approaches and methodologies in this area, and demonstrate how these can be incorporated by Transport for NSW (TfNSW).</p>

Hypothesis & Variables

Question	Response
<p>For explanatory research, please describe a clear hypothesis with variables for testing</p> <p>For exploratory research, please describe how the proposed research will contribute to future explanatory research</p>	<p>This research aims to understand best practice methodologies in CBA for evaluating the benefits of active transport infrastructure projects. Ideally, these methodologies or tools will be applicable in a TfNSW context.</p> <div style="display: flex; align-items: center; justify-content: center; margin-top: 20px;"> <div style="border: 1px solid black; padding: 10px; width: 300px;"> <p>Identify appropriate CBA tools or methodologies for evaluating the benefit of active transport infrastructure projects (in a TfNSW context)</p> </div> <div style="font-size: 2em; margin: 0 20px;">➔</div> <div style="border: 1px solid black; padding: 10px; width: 200px;"> <p>Enable future investment in active transport</p> </div> </div>

Strategic Criteria & Alignment

Question	Response
Alignment with strategic theme	<p>This problem statement is aligned with the Strategic Research Theme of 'Successful Places'. This research is also aligned with the 'Successful Places' outcome in the Future Transport Strategy 2056 which outlines how active transport encourages physical activity and increases social interactions within these communities.</p>
External driver of change analysis Outline how the research will better position TfNSW to respond proactively to macro drivers of change	<p>We use PESTLE analysis to identify and describe the external drivers of change that this research would help TfNSW be in a better position to respond to.</p> <p>Political</p> <p>'Delivering infrastructure' and 'Tackling Childhood Obesity' are two of the Premier's Priorities. The proposed research is central to supporting the public value proposition for the NSW Government.</p> <p>Economic</p> <p>As populations increase, there is an increased demand on all government infrastructures. The delivery of capital project, such as those that help improve the wellbeing of individuals and that create place-making benefits, are likely to have indirect economic effects.</p> <p>Social</p> <p>The ability to capture the numerous social benefits associated with active transport in business cases will lead to more projects with place-making benefits being funded and implemented. Social benefits include increased social wellbeing (a sense of belonging and inclusion with others), quality of life and community strengthening through increased social interactions on streets and within neighbourhoods.</p>
Forward looking	<p>This problem statement is forward looking as there is currently no known formally recognised NSW/Australian method of valuing active transport in business cases and CBAs.</p>
Potential research impact	<p>The successful development of this approach has the potential to make previously unviable projects viable, and allows for greater emphasis on active transport.</p>

Technical Criteria

Question	Response
Innovation Outline how the proposed research will result in new knowledge	<p>As there is presently no accepted tool or CBA approach for capturing the benefits of TfNSW infrastructure projects that provide active transport, this research will be making a unique contribution. The methodology (or tool) that ultimately results from this research has the potential for widespread application.</p>
Basis in completed research and/or observed practice	<p>There are a number of studies that have explored the economic benefits of active transport as it relates to a CBA; studies have also examined the direct and indirect economic benefits of physical activity. There are also a series of reports and reviews available from an Australian context. Examples include A systematic review, An Australian Report Active Transport by VicHealth. TfNSW understand that there are jurisdictions around the world that have developed methods of valuing active transport and have made efforts to incorporate this into their CBA, such as in London and Amsterdam.</p>
Feasible data requirements	<p>In seeking to apply new methodologies in an applied manner, it is anticipated that TfNSW would provide data on its existing approaches, including previous and current assessment of capital projects.</p>

Level of Collaboration & Resource Requirements

Question	Response
<p>Level of collaboration</p> <p>Please select the level of collaboration required to complete the proposed research</p>	<p>1. 'Quick-Fire' Research <input type="checkbox"/></p> <p>Intense bursts of research activity (e.g. under 8 weeks). Intended to make use of 'hackathon'-type environments, where students/researchers work collaboratively and intensely on particular problems involving data interrogation and visualisation.</p> <hr/> <p>2. Undergraduate Final-Year Research <input type="checkbox"/></p> <p>Suitable for final-year undergraduate students (e.g. capstone, Honours) as part of the research requirements for their undergraduate degree (i.e. 1 to 2 semesters).</p> <hr/> <p>3. Higher Degree Research <input checked="" type="checkbox"/></p> <p>Project may form whole or part of a postgraduate research degree (i.e. Masters, PhD), and contribute to new knowledge (i.e. 1 to 3 years).</p> <hr/> <p>4. Major Collaborations and Funded Research <input type="checkbox"/></p> <p>Project may form the basis for a significant collaboration agreement between TfNSW and the relevant research institution, including major competitive grant funding (e.g. Australian Research Council funding with TfNSW as an industry partner).</p>
<p>Comments</p>	<p>This project could form all or part of a PhD or Master of Research</p>
<p>Supporting TfNSW resources</p>	<p>TfNSW will facilitate access to subject matter experts and project support (up to 4 hours per week). TfNSW will also endeavour to help attain required data and access to business cases.</p>