

Monetising time savings makes toll roads financially stack up

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Credit: Queensland University of Technology

Putting a dollar value on the savings from traffic congestion, noise and air pollution as a result of toll roads and tunnels will make large infrastructure projects more cost effective, according to a new study by QUT.

Sae Chi, from QUT's Science and Engineering Faculty, has compared the financial and economic cost of public and privately operated toll roads and tunnels, and found the net impacts to the community should be taken into account in decision-making about transport [infrastructure](#) investment.

The research has been published in the *Journal of Transportation*

Engineering titled Measuring impacts and risks to the public of a privately operated toll road project by considering perspectives in cost-benefit [analysis](#).

Ms Chi said the financial bottomline should not be the only consideration when determining when whether or not to invest in toll roads and tunnels.

"If governments continue to rely on limited cost-benefit analysis or solely on financial analysis it will not encourage infrastructure development," she said.

Ms Chi said to share the costs and risks of building and operating toll road and [tunnel](#) projects, governments often partnered with the [private sector](#).

She said while private operators were looking for a bottomline return on investment, governments needed to consider benefits in addition to toll charges and traffic flows that can result in profits.

"Even when partnering with the private sector, it is important that governments consider the public benefits and monetise savings such as travel time, reduced [costs](#) to drivers and the positive outcomes for the environment," she said.

"When governments put a dollar figure on these factors the cost-benefit analysis sways much more heavily in favour of supporting infrastructure investment."

Ms Chi said current cost-benefit analysis for [road](#) and tunnel projects was limited in Australia, and in most cases focused on the financials and not the public benefits.

"But governments are responsible for public decision making for the good of their constituents and this includes ensuring that public funds are invested wisely and that regulation of private sector activity ensures a net benefit to society," she said.

Ms Chi said this study findings would help support increased infrastructure investment across the nation, especially in high-growth population areas.

More information: Sae Chi et al. Measuring Impacts and Risks to the Public of a Privately Operated Toll Road Project by Considering Perspectives in Cost-Benefit Analysis, *Journal of Transportation Engineering, Part A: Systems* (2017). [DOI: 10.1061/JTEPBS.0000088](https://doi.org/10.1061/JTEPBS.0000088)

Provided by Queensland University of Technology

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