

# Why don't we build safe roundabouts?

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## Abstract

(150 word limit) In New Zealand, we are currently being told that it's time we stopped paying the road toll. Yet our roundabout design philosophy utilising a tangential design is based on maximising efficiency. This may also be why urban planners typically decry their use at all – our roundabouts permit high traffic speeds that make crossing (or using) them on foot or by bike difficult – if not impossible for mobility impaired or elderly road users. In contrast, the continental European focus based on radial designs is on maximising safety. Recently, Australasian designers have begun using raised safety platforms for speed control. This paper will assess design philosophies, their underlying reasons, and recommend actions that aim at improved safety.

## Background, method, results and conclusions

(500 word limit) The paper will outline the difference in design philosophy between continental European practice and English-speaking countries, as documented in Wilke, Lieswyn & Munro (2014) based on Patterson (2010) in an Austroads research report.

A subsequent project by the authors saw us reviewing German roundabout design guidance in detail. This revealed that some standard facets of roundabout design using Austroads guidance are simply not possible for Germany as they are considered unsafe for people walking and cycling. The intention of this research was to provide practitioners with official guidance on how to design a continental European roundabout but this was “blocked”; it was instead published on ViaStrada’s website (Fowler & Wilke, 2016).

Based on the experience of submitting numerous drafts (13!) of our 2014 Austroads research paper, some commentary on the entrenchment of the tangential design philosophy that maximises efficiency can be discussed. This was further highlighted when the resulting draft roundabout guidance was blocked from getting published through official channels. All of this is inconsistent with the current messaging that it is time we stopped paying the road toll (NZTA, 2022) as part of the Road to Zero strategy.

Through research on raised safety platforms (Blewden, Mackie & Thorne, 2020), there is an acceptance that speed control even on state highway intersections is appropriate. This thinking has not found its way to roundabout design guidance. The authors challenge that for roundabouts, shifting the focus from efficiency to safety – for all road users – is crucial for achieving the vision of zero deaths and serious injuries on New Zealand roads.

## References

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