What works when improving safe road infrastructure? The 10 treatments that need to be used more

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Abstract

This paper describes a number of highly effective road infrastructure treatments. Each has been applied internationally, and been proven to be beneficial in improving safety outcomes. However, application within Australia for each has been limited to date. Based on several projects conducted on behalf of Austroads and for individual road agencies, this paper brings together the evidence base on these treatments, and makes the case for greater use of these. These include treatments that can be applied on high speed rural roads, as well as others that are beneficial on urban arterial networks.

Background

Provision of safe infrastructure is a key pillar in delivering Safe System outcomes. There are a number of sources of information on appropriate treatments that might be used to improve safety outcomes. However, there are a several treatments that are applied overseas, or only to a limited extent within Australia. Awareness of effective treatments that can be applied at high risk locations will assist road agencies improve the safety of roads.

Method

Individual evaluations have been conducted through several previous studies conducted on behalf of Austroads and individual road agencies. Some results are drawn from literature reviews, but most are based on before and after evaluations (with control group). Assessments are made on the crash reduction benefit for these treatments.

Results and Conclusions

Information will be provided on crash modification factors for the following:

- Raised intersection platforms
- Raised midblock platforms and wombat crossings
- Road diets
- Signalised roundabouts
- Rest on red signals
- Consistent curve design and treatment
- Wide centreline treatments
- Vehicle activated signs for curves
- Vehicle activated signs for intersections
- Gateway treatments