

## PUTTING SAFE SYSTEM INTO PRACTICE – SAFE SYSTEM ROADSIDE DESIGN PRINCIPLES

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### Abstract

To support the rollout of Victoria's Towards Zero Strategy which looks to address lane departure accidents on 20 of its highest risk roads, VicRoads Network Design Services – Safe System Design Team, developed a design guideline for practitioners on the application of continuous barrier treatments based on existing hazard treatment principles with a number of evolutionally learnings along the way. Practitioner/Policy Focused.

### Background

"Towards Zero - Safe System Roadside Design Principles for High Speed Divided Roads" May 2017 was developed to support a massive program in Victoria to install approximately 2,000km of flexible barrier (comprising of Wire Rope Safety Barrier and Flexible Weak Post Guard Fence) to reduce lane departure crashes resulting in fatal and serious injury accidents.

The purpose of the document is to ensure an effective and consistent approach towards the application of continuous safety barrier on selected M-Class and A-Class roads, as part of the *Towards Zero – Continuous Safety Barrier* program. This document incorporates current guidelines & practices, in conjunction with the Safe System principles and Towards Zero vision, to provide design principles that are cost effective and prioritise life & health to minimise fatal and serious injuries as far as practicable.

These design principles will assist practitioners with:

- ensuring our roadside transitions towards a Safe System and vision of zero deaths and serious injuries.
- designing safety barriers to maximise safety benefits and achieve a safe system solution in consideration of current guidelines and practices.
- ensuring that the design and application of continuous safety barrier is consistent and effective across the entire program.

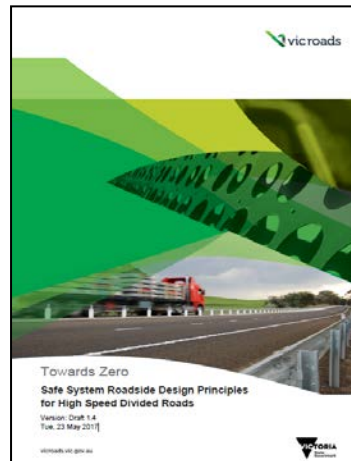
This document is currently intended for M-Class and A-Class roads as these roads often serve the function of connecting capital cities and major provincial centres, and linking major centres of production with Victoria's export terminals; hence a typical road function and characteristic can be assumed, such as the road stereotype, high operating speed, sealed shoulders and minimal access points, etc.

While continuous roadside barrier is considered an effective treatment for all high speed roadsides, including B-Class and C-Class, it is recognised that these road types/functions often have unique features or are more constrained, and will require solutions that address context and may be different.

The document is currently undergoing its second revision, with a number of learning's prevalent including emergency service access to the roadside, maintenance and changing the use of the road being treated such that provision can be made for those wishing to pull over adjacent to the barrier and traffic.

The document also challenges previous standard practices as we look to reduce costs in order to protect more roadsides and spread both our available funding and coverage of these types of crashes further.

If successful this abstract is proposed to be a presentation, where copies of the document will be made available to attendees.



*Figure 1. VicRoads - Safe System Roadside Design Principles for High Speed Divided*

## References

Towards Zero  
Safe System Roadside Design Principles for High Speed Divided Roads  
Version: Draft 1.4 Tue, 23 May 2017