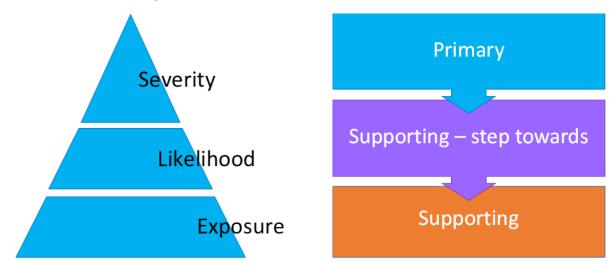


## Module 2 Tutorial Designing for harm elimination

Revision	Date	Ву	Revisions
1.0	01 Jul 2020	C Stokes	First release

## Introduction:

The Safe System introduces two practical responses to the need for identifying road design and operation practices that align well to the objective of harm elimination. Firstly, greater emphasis needs to be placed on reducing the consequences of crashes, rather than just reducing the likelihood that crashes will occur (*below left*). Secondly, treatments for mitigating harm should be selected on a hierarchical basis, with those best aligned to the objective of eliminating fatal and serious injuries considered first (*below right*).



As a practitioner, it is important that you are mindful of the need to support Safe System principles and objectives through the selection of appropriate design and operational treatments. In this tutorial, we will discuss the hierarchical selection of treatments through the lens of two high speed rural road treatments.

## Instructions:

Students should review Module 2, Snippet 6, *Design that supports harm elimination* of Safe System for Universities before undertaking this activity.

Form a group of 2-4 students. As a group, review the two case studies *Audio Tactile Line Marking Study* and *Hume Freeway Safe System Transformation*. Think about the treatments that are considered in each case study (audio tactile line marking and continuous-length flexible barriers) and how these may or may not align with the objective of harm elimination.

As a group, discuss and answer the following questions while considering how each treatment fits within the Safe System treatment hierarchy:

## Questions

- 1. Of the two treatments, which do you think better manages the consequences of crashes when a driver accidentally moves out of their lane?
- 2. What are the key similarities or differences in the way each treatment reduces the number of crashes? Which treatment do you think will be more successful at reducing the number of crashes of any severity?
- 3. The Safe System objective of harm elimination is primarily concerned with eliminating fatal and serious injuries. Which of these two treatments do you think will be more successful at reducing the number of high severity crashes?
- 4. Some modes of transportation (e.g. car, truck, motorcycle) are easier to cater for than others. What modes of transportation that may use high-speed rural roads do you think will be more difficult to safely cater for? Do you think either treatment could successfully cater for the safe mobility of any of these transportation modes?
- 5. Where in the Safe System treatment hierarchy do you think each treatment fits? Using this knowledge, which treatment do you think should be given greater consideration if you were overseeing the design of a high-speed rural highway between regional centres?