

Module 2 Tutorial The Safe System

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Introduction:

The Safe System introduces a new road safety philosophy based on the notions that people will make mistakes, and that no person should be killed or seriously injured as a result of road transportation system use. The Safe System is represented by four pillars in which actions can be taken to protect road users. These pillars are safe road users, safe roads, safe speeds and safe vehicles. Road practitioners have a responsibility to implement Safe System practices with the objective of creating a safe road system. However, the way in which this implementation is achieved in practice can be unclear to even the most experienced Safe System practitioners. In this tutorial, we will discuss some of the challenges faced by road safety practitioners in implementing the Safe System through the lens of strategic road safety initiatives.

Instructions:

Students should review Module 2, Snippet 3, *What is a Safe System?* and Module 2, Snippet 5, *How are things different under a Safe System?* of Safe System for Universities before undertaking this activity.

Form a group of 2-4 students. As a group, review the case study *Saving Lives on Country Roads Program*. Think about the goals of this program and the methods by which these goals could be turned into practical solutions. Now, consider that you are a practitioner charged with overseeing the review of road safety along a section of the rural road network. In this role, it is your responsibility to ensure that the goals of this program and of the Safe System are placed into practice.

As a group, discuss and answer the following questions while considering the overarching goals of the above program and of the Safe System:

Questions

 Country roads serve different roles for different road users. As some examples, these roads can act as commuting routes for people travelling between towns; as access roads for utilities and emergency services; as frontages for local businesses; as leisure routes for tourists; as freight routes for inter- and intra-state commerce; as public spaces for residents where they pass through country towns; and as a means for children to access schools, playgrounds and other facilities.

What are some of the needs that these road user groups may have? Can you identify groups that may have common or conflicting needs with regard to their safety? For example, do you

think the mobility needs for freight vehicles and the access needs of children can be compatible?

- 2. Consider the case of heavy vehicle access through a township. Heavy vehicles, mostly for interand intra-state commerce purposes, use the town's main street as it forms part of the state highway system. Concerns have been raised about interactions between these heavy vehicles and the town's residents. Three mitigation options have been proposed. These are:
 - a. An education campaign to inform the town's residents of the dangers of heavy vehicles
 - b. The installation of pedestrian crossings along the main street to facilitate safer access to shops and businesses
 - c. The re-routing of heavy vehicles around the town by using a less heavily trafficked road.

How well do you think each option aligns to the principles of the Safe System? When answering this question, consider issues such as where responsibility is being placed, what are the likely safety benefits, what new safety issues may be introduced, and whether safety is being compromised by other agendas.

- 3. Fatigue is a substantial problem along country roads due to the long distances and travel times. Fatigue can result in lane departure crashes where a driver will drift out of his or her lane and collide with another vehicle or a hazardous object on the side of the road. Consider the following two treatment options for dealing with the consequences of fatigue:
 - a. The placement of roadside and centreline road safety barriers to capture errant vehicles and prevent them from being involved in more severe crashes
 - b. The provision of regular rest stops to provide space for drivers to pull off he highway and recover from fatigue.

To what extent do you think each treatment option mitigates the risk of crashes of any severity and the risk of fatal and serious injury crashes? To what extent do you think each treatment places the responsibility of road safety into the hands of road users or system managers? Based on these considerations, which treatment do you think has greater alignment to the principles of the safe system?

4. Speed is a considerable issue on country roads and can be linked to the severity of outcomes in many crashes. There remains a debate as to whether the greater issue is the speeds at which road users are permitted to travel (the speed limit), or the excessive speeds at which some non-compliant road users choose to travel (speeding). Historical road safety practices along country roads have targeted non-compliant behaviour by focussing on speeding and speed enforcement. More recent practices have introduced the notion that speed limits on country roads are too high and should be lowered.

Consider the issues of speed limits and speeding. Which do you think is the greater issue in terms of the harm that is being done? Now consider the historical and more recent practices aimed at mitigating the issue of speed. How well is each practice aligned to the Safe System? Are both practices relevant under a Safe System?