

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

Introduction:

The Safe System is founded on the ethical imperative that people should not be fatally or seriously injured as a result of using the road transportation system. A fundamental difference between the historical approach to road safety and the Safe System is the way we plan for the future. Historical approaches have looked to make the road transportation system safer, by aiming to reduce the number of people being fatally and seriously injured. The Safe System looks to make the road transportation system safe, by aiming at a target of zero fatal and serious injuries. In this project, you will map the ethical imperative of the Safe System by evaluating its effect on the quantum of harm that will occur over the next few decades.

Instructions:

Students should undertake this project while reviewing Module 2 of Safe System for Universities. This project can be undertaken individually or in small groups.

To undertake this project, you will need to map road trauma for a section of the road transportation network. Select a section of the road transportation network for which you can obtain reasonable crash data. This could be for your local council area, a state, or for an entire country. BITRE¹ reports annual statistical summaries on road crashes and road trauma in Australia and for each individual state.

Steps:

- Use a source of road crash data, such as the BITRE annual statistical summary, to identify the number of people who are fatally and seriously injured each year.

Tips: you will use this data as your base data upon which you will map the quantum of road trauma. Not all data sources will use the terminology of fatal and serious injuries. For example, BITRE uses the terms “fatalities” and “hospitalised injuries”. Note that hospitalised injuries are not always the same as serious injuries – in the absence of serious injury data, hospitalised injuries data may be used.

¹ https://www.bitre.gov.au/publications/ongoing/road_deaths_australia_annual_summaries

- Review the road safety strategies that have been applied to your section of the road transportation network. Most strategies will provide an overarching target, such as the reduction of fatal and serious injuries by 30% over the next ten years².

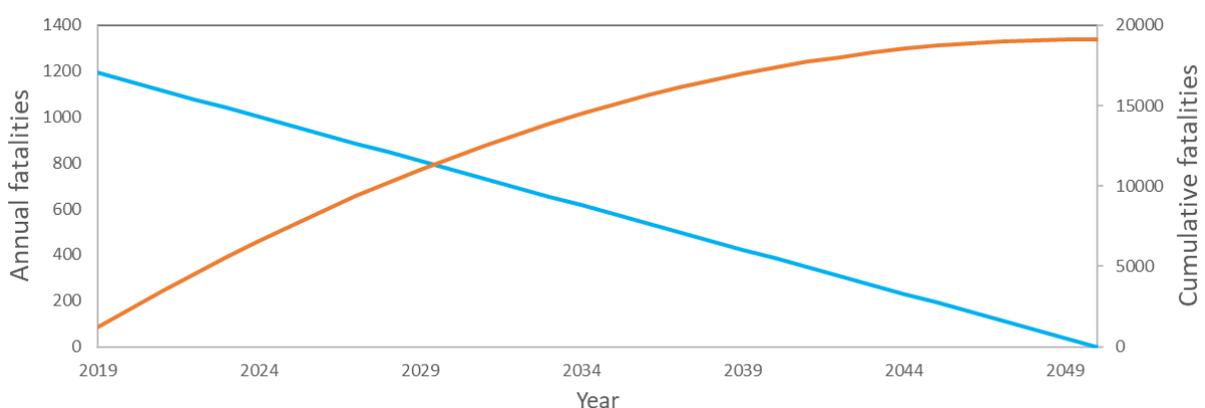
Tips: most states have road safety strategies that are specific to their own road transportation network. Nationally, Australia and New Zealand have road safety strategies that apply to each country's entire road network. Local governments may also have road safety strategies, often within their broader transport strategies. The targets set by local governments may not be as prescriptive as those set at state and national levels.

- Using the target from your road safety strategy, evaluate the number of fatal and serious injuries that will occur each year for the next five decades. What is the cumulative number of lives that have been lost, and people that have been seriously injured, for each year over this timeframe?

Tips: Most road safety strategies focus on the rate of fatal and serious injuries, such as the number of people killed or seriously injured each year. This often paints an optimistic picture, as even a small reduction in fatal and serious injuries appears to be an improvement. By plotting the cumulative number of fatal and serious injuries, we can perceive the true quantum of harm that is being done. Doing so can show the urgency with which we need to transform the road transportation system.

- Repeat the above process with Safe System aligned targets. You may find these in more progressive road safety strategies, or you can develop your own.

Tips: A Safe System aligned target is one that sets a defined date for reaching zero fatal and serious injuries – the date from which no one will be killed or seriously injured as a result of using the road transportation system. To better understand the affect that the dimension of time can have on the quantum of harm, you can repeat this process with different target dates. Remember that you will need to interpolate the reduction in fatal and serious injuries that occur each year from today's levels to zero. An example for fatalities with a zero date of 2050 has been provided below.



- Provide a narrative around the difference that different targets can make, and the effect this has on achieving the Safe System ethical imperative that no person should be killed or seriously injured as a result of using the road transportation system.

² <https://www.roadsafety.gov.au/nrss/targets>

Tips: Think about what will happen beyond the next few decades. If we continually look to reduce road trauma, but not eliminate it, can we achieve an ethically satisfactory outcome?

*What other factors would you consider in your decision as to which target should be adopted?
Are there any factors that would lead you to adopt a lesser safety target?*