

## Zero 2050 in Victoria

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### Abstract

Several countries and overseas jurisdictions have formulated ambitious road safety targets by setting a date for achieving Vision Zero. By targeting zero with a date for Victoria, much can be done in the next few years to prepare for the major challenges faced in moving close to zero. The aim of this paper is to map a road trauma elimination agenda to 2050 by outlining step changes and requirements of roads, vehicles and road users. A plausible zero scenario can be developed, but it will bring some major challenges including a clearer safety philosophy than what exists today.

### Background

Several countries and overseas jurisdictions have formulated ambitious road safety targets by setting a date for achieving Vision Zero. The European Commission and the US have adopted a target, and a road map to achieve close to zero fatalities and severe injuries by 2050 (EC, 2011). There are several reasons for adopting these targets:

- **Intermediate targets placed in context.** Close to zero by 2050 translates into an approximate 50% reduction per decade.
- **Understanding what's at stake.** By setting zero with a date, we can estimate future trauma and hence quantify how many lives and severe injuries can be prevented.
- **A focus on the ultimate target.** While intermediate targets are helpful, they sometimes favour cost-effective, short-term solutions, leaving a substantial residual problem and, hence, the need for additional treatments in future.
- **The Safe System.** Something that was initially seen as utopia is today possible to envisage, at least on a conceptual level (Stigson, 2009). Our existing knowledge shows how roads, vehicles, speed limits and users can interact to form a safe system.
- **Ambitious targets drive policy, programs and innovation.** Targeting zero with a date enables a gap-analysis to be undertaken, based on the current state of the network, to identify the additional programs and innovation needed.

By targeting zero with a date for Victoria, much can be done in the next few years to prepare for the major challenges faced in moving close to zero. The aim of this paper is, therefore, to outline step changes required to achieve close to zero deaths and severe injuries by 2050. It maps the way forward, describing the predicted zero scenario in terms of vehicle safety development, road infrastructure upgrades, speed limit revisions and what is expected from the road user in a safe system.

### Method

A back casting approach was used to: (1) develop a baseline with a 'business as usual' scenario, (2) define a safe system for Victoria in terms of requirements for roads, vehicles and road users, (3) investigate the gap between the current state and the safe system state and (4) quantify the contributions from infrastructure projects and speed limit revisions to achieve zero in 2050.

## Results and conclusions

This paper maps the requirements of roads, vehicles and road users, and some necessary step changes to achieve close to zero fatalities and severe injuries by 2050 in Victoria. A plausible zero scenario can be developed, but it will bring some major challenges. Moving towards zero will require a clear safety philosophy where: (1) every new infrastructure project must align with safe system design principles, while also contribute to Victoria's economic and social prosperity, (2) movement will become a function of safety, whereby travel speed depends on how well energy can be managed and (3) innovation will be essential in overcoming problems with inadequate solutions today. Moving towards zero will require effective community engagement, and new economic models and planning frameworks, where safety is a fundamental, integrated element in the processes for achieving a sustainable transport system.

## References

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