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### Commentary on Road Safety

# Posted Speed Limits: When is the maximum posted limit not the recommended?

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#### **Key Findings**

- Excessive speed continues to be a causal factor in road trauma.
- Country road users are three times more likely to be killed than city drivers.
- Speed reduction on country roads in lieu of road treatment options is essential to reducing trauma.
- The posted speed limit may not be suitable for the road and prevailing conditions.

#### Towards Zero and Enhancing Community Safety

Towards Zero 2016//2020 Victoria's Road Safety Strategy sets a long term vision of zero deaths and serious injuries on our roads and a target of less than 200 deaths by 2020. Research tells us that country road users are three times more likely to be killed and 40 % more likely to be seriously injured than drivers in metropolitan Melbourne (Victoria Police, 2014). That 3 out of 4 country fatalities involve older model cars speaks volumes about modern-day "safer cars". Accordingly, our aim is to reduce road trauma and create safer roads by working closely with our road safety partners and the community to embed the Safe Systems approach; Safer roads, Safer speeds, Safer road users and Safer vehicles.

In 2013, Victoria achieved a record low Lives Lost of 243. This is in direct contrast to 1970 when 1061 lives were lost. The introduction of the mandatory wearing of seat belts, random alcohol / drug testing, fixed / mobile safety cameras and reduced speed limits in built up areas, central Melbourne, shopping strips and school zones combined with improved road infrastructure and vehicle safety have contributed to road trauma reductions.

In 2012, Victoria Police piloted and subsequently implemented the Speed Tolerance Enforcement Program

(STEP). STEP aims to shift community attitudes and beliefs around speeding; to have the community see the posted speed limit as essentially the limit, thereby enhancing compliance and removing the concept of de-facto speed limits. During the initial pilot, low level speed enforcement increased by 144% and overall speed enforcement by 27%, equating to an additional 4442 motorists being penalised for speeding (Victoria Police 2016).

#### The Adaptive Challenge

Notwithstanding progress in reducing road trauma, the recurrence of speed, impairment, and road conditions continue to be causal factors in road trauma. In 2016, there were 291 fatalities. Frustratingly, 150 of these fatalities occurred in rural locations, representing an increase of 9% compared to 2015. More than half of these were single vehicle crashes. The majority involved loss of control prior to running off the road. 72% of rural crashes occurred in 100 kph speed zones or higher (Victoria Police, 2017).

The design of our major highways and freeways prevent head on crashes through engineering such as a solid divide or concrete bollards or wire rope barriers in the event of a run off road situation. There are no trees to hit and any light post or gantry pole is embedded in a concrete bollard. *However*, the only treatment stopping these types of crashes on a country road is a painted white line, yet both have a speed limit of 100 kph. It is little wonder that statistically people are three times more likely to die on country roads.

It is acknowledged that humans make mistakes which are often seemingly minor mistakes or lapses of judgment, but often with fatal consequences. Victoria continues to invest significantly in safer roads through engineering and road treatment options which are designed to accommodate error and minimise impact forces to humans. That said, many sections of Victoria's vast road system remain without engineering, design and treatments within the context of a Safe System. Physical treatments simply cannot be applied to every Victorian road as the network is too vast. The absence in many rural areas of safety features such as roadside and central median barriers or other traffic separation often expose road users to an unforgiving environment. Increasing this risk is the fact that many such roads have posted speed limits of 100 kph. The case for a review of speed limit settings in such areas in lieu of applying engineering treatments is very compelling.

There are many in the community that see a posted speed of 100 kph on rural roads and believe this to be the safe and recommended speed. However, it is not. It is the maximum speed (and the default speed on rural country roads in Victoria) and we implore everyone to understand this. It is up to the driver to assess the application of the maximum speed limit depending on the circumstances. We simply ask that everyone drive to the conditions, not necessarily to the posted speed limit.

## The Need for Discussion around Speed Settings

There is a well-established body of evidence that confirms the probability of crashing increases with higher travel speeds. Crashes at higher speeds clearly result in more severe impacts and poor road safety outcomes. Equally dangerous is travelling at an inappropriate speed, 'Driving too fast for the circumstantial road conditions, despite being within speed limits' (Oxley & Corben, 2002).

Also well-established is that crash incidence and injury severity decline with speed reduction (Oxley, Corben & Diamantopoulou, 2001) and that safety outcomes can be improved by lowering speed limits as well as investing in road infrastructure (Risby, 2015, p.39). Therefore, while the importance of continued investment in road infrastructure cannot be overstated, so too are discussions with rural communities around speed limit settings that are suitable for the prevailing conditions and challenging attitudes that may regard mobility as being a higher priority than safety. There is some irony that many rural communities oppose the reduction of speed limits as a treatment option and yet two thirds of those who die on country roads are country people!

#### Conclusion

While progress in road trauma reduction has been achieved, every day across Australia we see more than 3 people being remembered by grieving family and friends who are left to say goodbye to those whose life need not have been lost. In 2016, we lost more than 1300 people on Australian roads. Further road trauma reductions are achievable through safer speeds, where timely road engineering treatments may not be possible. "There is no one that someone won't miss".

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