

Regional and remote road safety: A national view

Lisa Wundersitz^a, Peter Palamara^b, Kate Brameld^b, Simon Raftery^a, James Thompson^a,
Matthew Govorko^b, Melissa Watts^c

^aCentre for Automotive Safety Research, University of Adelaide, SA

^bCurtin-Monash Accident Research Centre, Curtin University, WA ^cRoad Safety Commission, WA

Abstract

Road crash fatality rates continue to be unacceptably higher in regional/remote areas than major cities. This study investigates the causes of road crashes in regional/remote areas and provides strategic guidance to identify the most effective approaches to eliminate harm on the road network in these areas. Consistent with the Safe System approach, strategic planning across all components of the system is necessary to allocate resources and eliminate harm in regional/remote areas over a realistic long-term time frame. The paper concludes with a discussion of evidence-based countermeasures and new initiatives urgently needed to eliminate harm on regional/remote roads.

Background

Drivers and riders in regional/remote areas in Australia face an unacceptably greater risk of death and serious injury than those in major cities. In the current National Road Safety Action Plan (2018-2020), remote road safety, and the investigation and implementation of key interventions, is identified as a critical action. The aim of this project was to understand the causes and contributing factors behind crashes in regional/remote areas in Australia and to provide strategic guidance to identify evidence-based actions that are needed to prevent such road trauma.

Method

The project incorporated a review of the recent literature, an analysis of trends in regional/remote crash data, a review of regional/remote road safety responses since the commencement of the National Road Safety Strategy 2011-2020 and wide consultation with stakeholders.

Results

Around one third of Australians live in regional/remote areas, but two thirds of fatal crashes occur in these regions. The fatality rate is five times greater in regional/remote areas (12.2 deaths/100,000) than in major cities and is highest in very remote areas (see Table 1).

Table 1. Australian population and fatal crash statistics by remoteness area, 2016

Remoteness area	Population ^a		Fatalities ^b		Fatality rate per 100,000
	N	%	N	%	
Major cities	17,331,653	72.7%	458	35.3%	2.6
Inner regional	4,341,032	18.2%	428	33.0%	9.9
Outer regional	2,041,946	8.6%	290	22.4%	14.2
Remote	293,765	1.2%	49	3.8%	16.7
Very remote	202,413	0.8%	70	5.4%	34.6
Total (Australia)^c	23,850,784	100%	1,296	100%	5.4

^a Source: ABS, 2017

^b Source: BITRE, 2018

^c Includes unknown remoteness area.

Key road safety issues in regional/remote areas were identified:

- High incidence of single vehicle and head on crashes
- High levels of alcohol and illicit drug use, unlicensed driving, non-use of seatbelts and driver fatigue
- Increased risk of crash and injury at higher speeds and disparity between speed limits and the quality of the road and existing infrastructure
- Increasing incidence of crashes involving motorcyclists
- Higher burden of road trauma among Aboriginal people
- High incidence of older, less crashworthy vehicles
- Delays in post-crash emergency response

Discussion

Given the sheer size, scale and lower quality of the regional/remote road network, long term strategic perspectives are important, and jurisdictions should use network safety plans to determine how to allocate resources. Systemic change is integral and treatment options should support corridor safety plans that incorporate solutions beyond infrastructure alone and facilitate enforcement, quality rest stops, and alternative transport options.

The speed limits in regional/remote areas are high and do not reflect the risks of travelling on lower quality roads or in the absence of adequate infrastructure. Speed management can be difficult in regional/remote areas but all efforts are to be encouraged. Vehicle based speed management technologies offer potential solutions as well as fleet management incentives. Jurisdictions expressed a desire for national leadership around the harmonisation of appropriate speed limits.

Vehicle safety, arguably, offers the most potential for regional/remote areas. Newer, safer vehicles can provide a higher level of occupant protection and offer technologies that can mitigate common crash types. Policies and incentives to accelerate proven safety and driver assist technologies into the driving fleet are needed with those involving government fleet purchasing the most promising.

Alternative transport services (e.g. NT Remote Bus Program) can provide critical services for remote Aboriginal communities enabling access to health, employment, education and social opportunities. Such alternative safe transport options should continue to be trialed and expanded. Community led collaborative programs in remote and Aboriginal communities to improve access to licensing and fit child restraints have achieved positive outcomes and should continue to be implemented and expanded.

Acknowledgements

This project was funded by Austroads. Acknowledgments of contributions to this project are made to Melissa Watts, Brett Clifford and Joanna Robinson from the Austroads Working Group and also Jeremy Woolley, Sally Edwards, Trevor Bailey and Emma Hawkes.

References

- Australian Bureau of Statistics (ABS). (2017). 3218.0 Regional population growth, Australia, 2016-17. Retrieved from <http://www.abs.gov.au/ausstats/abs@.nsf/mf/3218.0>
- Bureau of Infrastructure Transport and Regional Economics (BITRE). (2018). Road trauma Australia 2017 statistical summary. Canberra, ACT: BITRE.