ACRS Policy Position Statement
Rural and Remote Road Safety

Summary

The number of deaths and injuries on rural and remote roads per capita is proportionately higher than those seen in urban areas (1,2). While some prevention strategies are relevant across all roads, there are specific solutions required in rural and remote areas and unique challenges such as higher cost base, larger distances to travel, poorer quality of roads, lack of travel options, older vehicles, and a dispersed population. Solutions should be developed with the local providers, such as local councils, to build capacity and capability (including tools to support them), and associated research and policy.

Key policy positions

1. Understand and resource rural and remote road safety through accountability and responsibility at all levels of government; scalable and relevant road safety guidance, expertise and funding; and systems thinking.
2. Improve roads through network-wide safety assessments of all rural and remote roads, low-cost infrastructure and maintenance treatments, and comprehensive rural speed management policies.
3. Improve road safety services through access to affordable safe vehicles and vehicle maintenance, road user education, licensing and registration; access to emergency services; and safe, comprehensive options for public transport and active travel modes.

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Policy problem

Many countries have significant rural road networks, and many remote parts are long distances away from urban areas. Due to the differences in relative country sizes (e.g. Australia versus New Zealand), what is considered "remote" can vary. Most critically this has much greater implications for road safety in larger sparsely populated countries like Australia, where some areas can be several days away by road from relevant emergency and support services.

Road users in regional and remote areas, including in Australia and New Zealand, are at a greater risk of road trauma than those living in urban areas (3). The number of deaths and injuries on rural and remote roads is higher than those seen in urban areas (particularly fatalities); on a per-capita basis the difference is even more stark. Therefore, any attempts to reduce road deaths and serious injuries must identify and address the key issues faced in rural and remote areas.

Crash types over-represented in rural and remote areas include single-vehicle lost-control/run-off-road, overtaking, and head-on crashes. Heavy vehicles also contribute to more deaths and injuries in these areas. There are higher levels of drink-driving, unlicensed drivers, lower-quality vehicles, and unrestrained users found in serious and fatal crashes in rural areas. Crashes at high-speed cross-road intersections or involving active modes such as pedestrians and cyclists are also more likely to be fatal in rural areas (3).

Due to significant distances from emergency services and medical facilities, many crashes in remote locations result in death due to delayed medical response. The remoteness of many rural crashes can also lead to greater under-reporting, making it more challenging to monitor the types of crashes occurring and the circumstances in which they occurred.

Principles underpinning ACRS position

- Rural speed management strategies should be comprehensive in scope and not rely primarily on setting and enforcing speed limits. Speed limits should be set to match the road function, adjacent land-use characteristics, and road design.
- All road users should be provided safe access to travel on rural and remote roads no matter what mode of transport.
- The disadvantages faced by people who live and travel in rural and remote areas need to be addressed.
- Road design measures and corporate/organisational responsibility for reducing driver fatigue should be prioritised.
- Local government and communities should be actively and meaningfully engaged throughout road safety planning and delivery to foster collaborative partnerships.
- Additional funding to enable road controlling authorities / agencies to adopt a proactive approach to managing and maintaining rural roads will be important to improve safety on such roads.

Evidence base

Common issues facing Rural and Remote Roads are:

Higher vehicle speeds

Rural roads have higher posted speed limits (typically 60-110 km/h) and corresponding higher vehicle speeds and crash severity issues. There is often disparity between posted speed limit and infrastructure – high speeds, lower quality roads (including unsealed ones)(4). People become habituated to risk due to repeated travelling at high speeds with little or no experience of trauma from crashes (5).

Challenging and difficult terrain

Many rural road networks traverse hilly and mountainous areas and involve water features such as rivers and coastlines, and often feature sub-optimal road alignment and geometry standards (4). These road and roadside hazards can increase driving risk. Low traffic volumes may limit the expenditure available to provide better quality road links and safety features or to upgrade them over time.

Variety of road user type and purpose

Rural roads accommodate a wide range of road user types, sizes, and trip purposes, some of them not familiar with regular rural driving. Heavy vehicles are over-represented in crashes that occur here, and lead to more serious crash outcomes with smaller vehicles and vulnerable road users (6).

Data quality (incl. crashes, road condition, traffic) can be poor or difficult to collect

Many regional and rural areas are disadvantaged by limited measures of road quality and other relevant asset information, which can lead to poor road safety outcomes. Traditional assessment methods based on traffic volumes limit the level of investment in road safety in these areas (4,7,8).

Areas and communities typically have diminished access to facilities, services and agencies

Remote areas suffer from a lack of travel options and proximity to essential services, which often necessitates longer private motor vehicle journeys, resulting in higher exposure to road trauma (9). The vast distances also lead to a diminished ability for enforcement activities to occur.

Local governments are often not as well-resourced as other locations

Rural roads are often of lower quality than other locations, typically due to relative population and traffic density (noting that some areas have extensive tourists loads), which creates barriers to improving road safety there (10). Local Governments in these areas rarely have specific road safety staff. Staff numbers are generally low with responsibilities being spread across several portfolios (8,11).

Lower socio-economic and indigenous communities globally often over-represented

The lack of accessibility in remote areas can lead to lower literacy levels, difficulty accessing social services, and difficulty accessing drivers licensing (12,13) and vehicle registration services, which can subsequently result in higher rates of non-compliance of road rules, drink/drug driving, seatbelt use, child car seat use, unregistered/unlicensed driving, etc (4). These issues are particularly prevalent for indigenous groups globally (14).

More extreme climatic conditions

Rural roads are often in areas that experience severe climatic conditions including heat, cold, storms and flooding (1). These can lead to reduced levels of service (e.g. lane reductions, unsafe surfaces, vehicle damage) and road closures isolating remote communities. Despite these risks, some road users may still attempt to complete journeys through such difficulties.

Longer journey times/distances

Rural roads typically involve long journeys from population centres. As a result, drivers may be less likely to take appropriate breaks, causing fatigue (15). Vehicle operators have slower reaction times due to the unalerted driving conditions compared to urban conditions (16). When crashes occur, the time for emergency services to reach the crash site and to transfer casualties to suitable medical facilities are greater than urban areas (17-19).

A greater proportion of unsealed roads

Nearly all unsealed roads are in rural areas, making up more than half of the road network there. Unsealed roads produce additional road safety issues not as evident with sealed roads, due to poorer surface conditions, leading to higher crash rates per vehicle-km travelled (20).

Recommended policy actions

1. Apply long-term accountability and responsibility at all levels of government in support of evidence-based action towards addressing rural and remote road safety.
2. Provide scalable and relevant road safety guidance, expertise, and funding, considering the level of resourcing available to road managers in rural and remote areas.
3. Apply systems thinking (including the role and contribution of multiple stakeholders) to address specific rural and remote road safety issues (as per ACRS Systems Thinking Policy Position Statement).
4. Resource network-wide safety assessments of all rural and remote roads and make long term planning and proactive investment decisions.
5. Prioritise appropriate best-practice low-cost infrastructure and maintenance treatments for rural and remote areas.
6. Implement comprehensive rural speed management policies, for both mid-block and intersection segments (as per ACRS Speed Management Policy Position Statement).
7. Increase access to affordable safe vehicles and vehicle maintenance in rural and remote areas.
8. Increase access to road user education, licensing, and registration in rural and remote areas.
9. Improve post-crash care by increasing access to emergency services in rural and remote areas.
10. Address the provision of safe, comprehensive options for public transport and active travel modes in rural and remote areas.

ACRS actions

1. Advocate for greater resources in terms of funding, research, and guidance to be focused on addressing rural and remote road safety issues.
2. Promote best practice measures and case studies that are successfully addressing rural and remote road safety problems.
3. Support the development of a new Rural Road Safety Support Network for practitioners to share best practice in this area and to advocate for better road safety outcomes.

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