ACRS Submission on Regulatory Impact Analysis to Reduce the Open Road Default Speed Limit

About the Australasian College of Road Safety

The Australasian College of Road Safety was established in 1988 and is the region's peak organisation for road safety professionals and members of the public who are focused on saving lives and serious injuries on our roads.

The College Patron is Her Excellency the Honourable Sam Mostyn AC, Governor-General of the Commonwealth of Australia.

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Introduction

The Australasian College of Road Safety is the region's peak membership association for road safety with a vision of eliminating death and serious injury on the road. Our members include experts from all areas of road safety including policy makers, health and transport professionals, academics, community organisations, researchers, federal, state and local government agencies, private companies and members of the public. The purpose of the College is to support our members in their efforts to eliminate serious road trauma through knowledge sharing, professional development, networking and advocacy. Our objectives include the promotion of road safety as a critical organisational objective within government, business and the community; the promotion and advocacy of policies and practices that support harm elimination; the improvement of relative safety outcomes for vulnerable demographic and user groups within the community; the promotion of post-crash policies and practices; and the promotion of a collegiate climate amongst all those with responsibilities for, and working in, road safety.

The College believes that we should prevent all fatal and serious injuries on our roads; the road traffic system must be made safe for all road users; system designers should aim to prevent human error and mitigate its consequences; life and health are not exchangeable for other benefits in society; and that all College policy positions must be evidence based.

The College identified a Regulatory Impact Analysis (RIA) for default rural and urban speed limits, along with making publication of safety star ratings as a condition of Federal transport funding, as its highest priority policy demands while the current National Road Safety Strategy and subsequent plans were being developed. The highly successful reduction in the default urban speed limit from 60 km/h to 50 km/h was our inspiration to initiate further step-change in this critical area and deliver further reductions in road trauma. We commend the Australian government for embarking on this initiative and we appreciate the opportunity to continue having a role in its implementation. We offer our continuing support to the Australian government, and to State and Territory and Local governments, when undertaking major initiatives that contribute towards the ultimate goal of prevention death and serious injury on our roads.

Overview of Consultation Regulatory Impact Analysis

The National Road Safety Action Plan 2023-2025 included an action item that the Australian Government would develop an RIA on reducing the default speed limit outside of built-up areas.(1) The development of this could lead to changes to the Australian Road Rules, which is the model law that states and territories base their own road rules on, giving them the opportunity to reduce default speed limits.

The consultation document notes that default speed limits apply on roads without sign-posted speed limits, which are generally less busy, and carry fewer vehicles on a daily basis than roads where speed limits are proactively signed and managed. In most cases, the default speed limit does not apply to busy roads such as freeways and main roads, which most people travel on daily, because these roads have clearly sign-posted speed limits. While the scope of this consultation excludes considerations of speed management and speed limit setting as a whole, a national framework for setting speed limits is needed to address inappropriate and dangerous speed limits for sign-posted roads as well where the vast majority of exposure to road safety risk and incidence of road trauma occurs.

The RIA identifies lower default speed limit options for unsigned sealed and unsealed roads, and provides analysis of the expected costs and benefits for each of the options:

- Sealed roads
  - 90km/h
  - 80km/h
  - 70km/h
- Unsealed roads
  - 80km/h
  - 70km/h

The scope of costs and benefits considered in deriving benefit cost ratios were:

- Benefits
  - Avoided costs of fatalities and serious injuries – including avoided minor injuries
  - Avoided fuel consumption – including cost of fuel and emissions benefits
  - Other intangible benefits – including improved community amenity, reduced noise, reduced road maintenance, and enhanced perceptions of safety
- Costs
  - Travel time – including private, business and logistics travel time
  - Government costs – including administrative costs
  - Other intangible costs – including social acceptance and public opinion

ACRS response to the Consultation Draft

Transport system governance

Participants within the road system hold different levels of authority, responsibility and power. The Australian Road Rules are a key means by which Australian governments, including local governments, regulate the safety of the community when using the road network. Jurisdictional road agencies hold the highest level of authority and therefore accountability, given they advise and enact government decisions on the design and management of the road network, investment in maintaining and improving the network, and the speeds that may be travelled on that network. The regulation of motor vehicles and drivers, and police enforcement of road rules are also administered by jurisdictional government agencies. While other actors also hold responsibility, much of that is held by entities that are responding to the regulatory environment set by those agencies.

Every decision made regarding how the transport system is designed, built and managed is an opportunity to establish the safe movement of people and goods with health and wellbeing inherent in the system. A system-wide approach is required, one that builds on the Safe System approach adopted by all Australian jurisdictions and many countries globally, to reduce road trauma.(2) The policy position statement adopted by the ACRS, titled, 'A New Systems Thinking Approach to Road Safety' can assist understanding of and provides guidance on, how to incorporate this approach to Australian government policy.(3)

The RIA must acknowledge the leading role of Federal, State and Territory governments and their accountability in road safety outcomes, as holders of the highest levels of authority and power over the road transport system. This primary level of leadership needs to extend across multiple portfolios including transport and infrastructure, law enforcement and justice, land use planning, and health and human services. The Australian government must also exercise the required stewardship to lead other participants involved in the transport system such as states, territories, local government, research institutions and private enterprise.

The role of road safety in the regulation of speed limits

The consultation document acknowledges the commitment of the Australian Government and the jurisdictional governments of Australia to Vision Zero goals. However, road trauma trends show that Australia is not expected to meet the 2030 national road trauma reduction targets, nor the ultimate goal of a road transport system where no one is killed or seriously injured by 2050. The ACRS therefore contends that road safety must be one of the primary guiding principles for decision making on adopting and setting speed limits, and that radical change is needed in the way the transport system is planned, designed, operated and maintained if there is any chance to prevent thousands of people dying and a million or more being seriously injured between now and 2050.

Our current road transport system operates under speed limit setting conventions that set limits to match desired speeds to an adopted road hierarchy, with no real consideration of the limitations in the road environment or the level of risk posed to road users.(4) This has conditioned the community to think these speed limits are reasonable and safe, and has resulted in a legacy of dangerous environments where hundreds of deaths and thousands of serious injuries occur every year.

If Federal, State and Territory governments are serious about delivering the 2030 national road trauma reduction targets and providing a safe road transport system by 2050, then it is critical that speed limits are set that support these outcomes. A national framework and accountability mechanism is needed to ensure that speed limits are set to match the safety quality and function of the road infrastructure they apply to, whether or not speed limits are sign-posted.

Speed in the transport system

There is a comprehensive and unequivocal body of evidence linking excessive vehicle speed with high levels of road trauma:(5)

> *There are three main problem areas for speed management. First, high speed roads where, if a crash occurs, impact speeds will invariably result in the most serious casualty outcomes. Second, multipurpose roads where potentially high-speed vehicles encounter more vulnerable non-motorised road users such as pedestrians and bicyclists. Third, motor vehicles being driven/ridden too fast for the conditions.*

While engineering solutions such as road infrastructure upgrades (e.g. installation of roundabouts, provision of safety barriers etc.) and advanced driver-assistance systems on vehicles contribute towards harm reduction, speed limit setting and management is critical to reducing both severity and likelihood of a crash if Australia's road safety targets and goals are to be achieved. It is simply not practicable or cost effective to provide safe infrastructure without regulating safe speed limits. New vehicle technology cannot be relied upon to prevent all crashes and takes many years for the effects to come to fruition.

The implementation of much safer speed limit regulation needs to be the first step. Speed limit reductions are the single most cost-effective countermeasure for reducing death and serious injuries on our roads.(4) The ACRS recognises that the results of the RIA may look excessive to a community that has been conditioned to accept what evidence clearly identifies as extremely dangerous speed limit settings.

Simply applied as proposed, with no consideration of the safety and function of the infrastructure, or community education and awareness, the RIA may raise unfounded concern. A change leadership approach is required, which addresses speed limit setting across the road network.

A national framework for setting speed limits is needed. This should include default speed limits in both rural and urban areas, with a harmonised approach to sign-posting. There should be simple rules governing how road authorities may deviate from the default limit. Road authorities for example, should be allowed to set an alternative speed limit outside built up areas only where an appropriate assessment of road safety risk has been undertaken and concluded that it is safe to do so. 'Safe' in this context means that the road infrastructure meets a minimum 3-star safety rating using AusRAP or similar accepted risk assessments protocols.(6, 7) This safety star rating is aligned with the government's own 2030 national road trauma reduction targets.

The experience of ACRS members identifies a high level of variation in speed limit setting amongst jurisdictions throughout Australia. This ranges from Western Australia's default rural speed limit of 110 km/h (except for heavy vehicles, or vehicles towing caravans, which are both limited to 100 km/h), to Tasmania's progressive default speed limit of 80 km/h for unsealed roads. Beyond these maximum regulatory speeds, we are aware of private industry policies imposing lower speed limits for staff operating fleet vehicles on public and private roads. For example, Toll has set a maximum speed limit of 95 km/h for their fleet of B-doubles,(8) Simon National Carriers has limited its trucks to 90 km/h and Santos has set a maximum speed of 60 km/h on unsealed roads.(9)

Appreciation of risk in the transport system

There is a body of research demonstrating that people have a poor ability to accurately assess the health risks in their lives.(10) This can be described by comparing 'individual risk' with 'collective risk'. When drivers repeatedly perform tasks on the road system with little or no consequence over a lifetime, they can become habituated to this, often without realising the high risk of personal injury. Given that 'individual' risk of crashing is small, a doubling of this small risk is likely to go unnoticed, which can build a perception over a lifetime of driving that travelling at high speeds can have very little or no safety consequence.(4)

The total number of people that are killed or seriously injured every year when utilising our road system can conversely be described as 'collective risk', which can be difficult to reconcile on an individual level. The fact that ANCAP ratings are based on impact speeds of less than 70km/h(11) may also generate a false sense of security in people about the level of protection provided by their 5 star vehicles to survive crashes at higher speeds.

Managing the public's reaction to the proposed changes to speed limits will continue to be a challenge; however, this must be countered with understanding and sound empirical reasoning. Whatever else they may believe, those who are resistant to change have likely been conditioned to accept travelling at unsafe speeds because they have not been impacted directly by road trauma, making it difficult to understand the high potential for death and serious injury. The community at large has placed their trust in a legacy system of road and traffic design where speed limits were set without a modern understanding of the risk involved.

Rural and remote roads

The direct relationship between crash survivability and impact speeds is more pronounced in remote areas that are most likely to operate under default speed limits. The high potential for long emergency response times in remote areas has a direct impact on the survivability of road trauma victims. This places greater importance on the adoption of lower speed limits on these roads, to reduce both the potential for crashes to occur, and the severity of crashes that do occur.(12)

Co-benefits of reduced speed limits

There are many other benefits of setting lower speed limits beyond improved road safety, including:

- Reduced vehicle emissions
- Reduced vehicle operating costs
- Reduced demand for emergency response, hospitalisation and rehabilitation
- Improved mental health due to lower numbers of victims and first responders
- Reduced costs to repair or replace damaged property
- Lower insurance premiums and less risk for insurance providers
- Fewer lost-time injuries and workers compensation claims
- Reduced need to undertake expensive road infrastructure upgrades to match roads with prevailing speed limits on the basis of harm minimisation
- Reduced environmental impact on roadside flora due to the reduced need to clear roadside hazards or remove trees/vegetation for infrastructure upgrades
- Reduced environmental impact on wildlife due to the reduced likelihood of collisions with vehicles and reduced severity should a collision occur

The RIA therefore is an opportunity to contribute to multiple national priorities, including Australia's Net Zero targets, addressing the cost-of-living crisis, reducing the pressure on the nation's health system, improving workplace safety, and reducing the liability associated with insurance and lifetime care schemes.

a) Does the RIA adequately identify and define the problem? (p32)

The College commends the RIA for including several key elements of the problem of speed in the Australian context:

- The extensive nature of Australia's road network and low population density;
- 2030 targets and recent increases in road trauma rates;
- The role of the road transport system in moving both people and goods;
- An attempt to quantify how many people may be killed or injured on roads that operate under 'default' speed limits in the absence of any detailed data;
- The economic burden of road trauma;
- Reference to research about speed being the biggest single factor involved in crashes;
- Linkages between speed and the likelihood and severity of crashes;
- The impact of speed for those not in motor vehicles (people walking, cycling, using micromobility);
- Definition of speed's influence on the kinetic energy experienced in a crash;
- Discussion of other factors in road crashes
- The need for government intervention including 'negative externalities', over confidence in driving ability and poor risk perception;
- Discussion of the Safe System approach to road safety;
- The need for government intervention specifically relating to default speed limits.

However, there some areas of concern with the RIA. The ACRS believes the analysis presented understates the benefits and overstates the costs of reducing speed limits. It does not link to the implementation of the change in the default rural speed limit, and this means it is overly restrictive in its impact. The RIA, as its scope has been defined, ignores roads with inappropriate signposted speeds, and the significantly greater adverse impact on road trauma. This could lead to a situation where it is less safe to travel on a road with a signposted speed, which may create confusion and provide a false sense of security amongst drivers. This is further addressed below.

b) Are there any other problems not considered by this RIA? (p32)

Implementation, and its association with any public policy considerations, is not adequately addressed. There is no discussion on the change leadership required to change limits across networks, and achieve the safety and other benefits available. It should also consider how this relates to the inherent safety of road networks and, particularly in relation to this legislative proposal, the direct association with the AusRAP safety star ratings which are now being published with a focus on the rural network.

The ACRS also believes there is a disparate impact of the RIA among jurisdictions that has not been explored. Whilst the application of the RIA to unsealed roads is likely to be fairly uniform across Australia, as these roads are typically not able to have signposted speed limits, it will have a varying impact among jurisdictions for sealed roads. For example, the regulatory approach in some jurisdictions tends to result in almost every sealed road having signposted speed limits, with the changes proposed by the RIA therefore resulting in little to no change. Conversely, other jurisdictions have many unsignposted, sealed roads, and would therefore be impacted to a much greater extent by any reduction in the default rural speed limit.

c) Does the RIA establish a case for amending the default speed limits in the ARR? (p32)

There is a clear, evidence-based case to say that the current default speed limits are too high, that they are playing a critical role in generating preventable road trauma, and that they should be lowered as part of a strategic and whole-of-system approach. The College believes the evaluation constraints and assumptions acknowledged in the RIA, systematically understate the benefits of reducing the default speed limits and systematically overstate the costs. However, there is no doubt the RIA establishes the case for change in favour of community safety; the ACRS argues the net benefits of doing so would be greater than reported in the RIA.

d) Does the RIA present clear, well differentiated options that can achieve the stated policy objectives? (p36)

The RIA presents clear, well differentiated options that can achieve the stated policy objectives. The options are simple and concise and will, to varying degrees, make a direct positive impact on the safety of the community and contribute towards reaching 2030 national trauma reduction targets. Even given the understatement of benefits and overstatement of costs, the RIA provides important insight into how unsafe current rural speed limits are.

However, speed limit changes need to be part of a systems approach of supporting actions including risk assessment of the network to identify the hazards, risk mitigation measures and a risk mitigation investment program, if the objectives are to be achieved. The program will require investment in upgraded infrastructure; improved network accessibility and connectivity for freight; improved driver training, awareness and compliance; and capacity building for local and jurisdictional governments.

e) Which of the options analysed have the ability to meet the stated objectives? How could these be enhanced? (p36)

The ACRS advocates for a reduction to 70 km/h for both sealed and unsealed roads, unless an AusRAP safety star rating of at least three stars, demonstrated through a site specific assessment, is published by the road authority, noting that the public policy goal for 2050 will require a five star safety rating. The basis of this is the clear and demonstrable difference in road quality, traffic mix and volume, and reliability of road conditions comparing unsigned sealed and unsealed roads outside of built-up areas, which present different hazards and marked differences in road safety.

Ass argued previously, a national framework is required for setting speed limits, with simple implementation rules required to be met by road authorities. All options could be enhanced by ensuring a change management approach is adopted in the implementation of the default speed limits by road authorities, focusing on achieving the 2030 national trauma reduction targets. Road authorities could be required to report publicly on, for example:

- Why the default speed limit is not being applied on the road, whether the road is sign-posted or not
- If the default speed limit is not applied, the safety star rating of the road, and the safety star rating of the road if the default or some other speed limit was applied

f) Are there any other feasible options to address the problems identified in the previous chapter that have not been assessed in the RIA and should be considered? (p36)

No. The same level of benefit cannot be achieved through infrastructure improvement without an excessively large cost that would redirect funds from other important road safety priorities. There are many better ways to invest in sustainable mobility. The RIA reflects how dangerous existing speed limit settings are in Australia, and how out of balance they are with expectations of safe travel on our roads.

g) Of the options discussed in this chapter which would be the most effective at achieving the stated objectives and why? (p36)

The ACRS supports the application of a 70 km/h default limit for both sealed and unsealed roads. Speed is directly related to the energy imparted to the human body in a collision event. These limits provide the strongest safety benefits for achieving 2030 national trauma reduction targets. Achievement of the ultimate policy goal for 2050 of the elimination of serious road trauma – a bipartisan public position approved by Australian Ministers of Transport – will not be possible without radical change.

h) Which is your preferred option and why? (p36)

The ACRS supports the application of a 70 km/h default limit for both sealed and unsealed roads. These are the options that result in the greatest number of avoided fatalities and serious injuries, at a time when national road trauma numbers are increasing year on year for the last four years in a row, and will do so again at the end of 2025. No level of death or serious injuries on the nation’s roads is acceptable, and no level of trauma is acceptable as justification for adopting unsafe speed limits.

i) Are the objectives as expressed above appropriate? (p36)

Yes. The preparation of 2030 national road safety targets, and the decision of the Australian Ministers of Transport to adopt the targets, followed a well-designed consultation process, informed by modelling about the critical interventions required to achieve them. Reform of unsafe speed limits was a part of this modelling.

j) Are the lists of costs and benefits considered in this methodology sufficient to capture the costs and benefits of the proposed change? (p64)

Quantitative microeconomic cost benefit analysis, such as the one undertaken for this RIA, is fundamentally inappropriate for public safety policy including road safety. All safety critical industries and occupational safety in general requires a duty to ensure the health and safety of workers and bystanders in work settings. The legislation requires ensuring safety ‘so far as is reasonably practicable’, which is the test that should be applied here.(13)

ACRS questions why, for the purposes of the modelling, the Office of Impact Analysis’s value of statistical life (generalised across all aspects of society) of $5.7 million has been applied as the economic value associated with the loss of life and not the NSW of $9,295,290.(14) The NSW value established on the back of a properly designed economic survey within the community and should be used for official estimation purposes for all public road transport investment across Australia. Alternatively, a national study of the community’s willingness to pay to reduce the risk of death or injury on the road should be commissioned for official application by all Australian governments. We note also that the value of statistical life applied in New Zealand public road transport investment has recently increased to NZD12.5M.(15) Why is such a low safety-based value being applied to this critical public policy analysis? This underestimates the benefits in the RIA.

Conversely, we express caution that travel time costs can be potentially over-estimated (and in the case of small gains in travel time, often not worth valuing). Many studies have debunked the notion of reduced speed limits having a linear relationship with travel times, with reduced travel speeds often resulting in marginal increases in travel times as vehicles slow down to negotiate geometric features of the road network, interact with other vehicles, and over longer journeys the need for rest stops and refuelling have a much greater impact.(9, 16) The fact that major employers direct their drivers to travel at speeds less than the legal speed limit (e.g. Toll, Santos) provides a strong signal that there are more important factors to consider than travel time alone. Even given this divergent acceptance of preventable road trauma with other safety critical industries, the benefits are understated and the costs are overstated.

k) Do the scenarios considered capture the full range of uncertainty about the costs and benefits of the policy? (p64)

On balance, we accept that the scenarios considered in the RIA appear to reflect the level of uncertainty. This uncertainty reflects the restricted scope of the RIA to those roads where the least data is available (and the safety benefits are not available for a wider section of the community), and also serves to reinforce the critical need for better national data and monitoring, harmonised across all jurisdictions.

l) Are there any additional data that ought to have been considered when constructing the baseline FSI, VKT, efficiency and fuel costs? (p64)

A number of other factors could have been considered to support the analysis. For example, the South Australian analysis referred to in Table 11 of the RIA could have been expanded to a national level to estimate the infrastructure costs of upgrading roads that are subject to default rural speed limits, to match the equivalent FSI crash reduction of lowering the default speed limit. This would help counter any argument that lowering speed limits is a 'lazy' option and that the road should just be upgraded or maintained better.

Consideration of contemporary research into the relationship between speed and road trauma would also support more accurate analysis of the benefits of speed limit reduction. For example, the probability of a person being killed in a head-on collision is actually at speeds considerably lower than the 'survivable impact speeds' which Austroads reports as the internationally adopted benchmark. The benchmarks are based on 10% fatality risks as the acceptable risk level, and generate survivable speeds as 70km/h in head-on crashes, 50 km/h in side-impact crashes, and 30 km/h in pedestrian crashes.(17) The latest research however, indicates that the 10% fatality risk is much lower at 60.5km/h for head-on crashes and 43.7 km/h for side impact crashes, indicating that estimates of safety benefits are likely to be underestimated.(18, 19)

There are many great examples of speed limit case studies involving rural roads presented in an Austroads technical report published in 2025.(9) This includes:

- Mornington Peninsula Shire in Victoria reducing speed limits from either 100 km/h or 90 km/h down to 80 km/h, with an evaluation showing a significant decrease in vehicle speeds and the number of crashes.
- Successful speed limit reductions in regional South Australia reducing limits from 110 km/h to 100 km/h, in the Adelaide Hills reducing limits from 100 km/h to 80 km/h, and in the City of Onkaparinga reducing limits from 80 km/h to either 70 km/h or 60 km/h.
- Numerous positive co-benefits beyond road safety including economic impact, health and safety on unsealed roads, reduced emissions and protecting wildlife.
- Evidence from Australia and New Zealand that reducing speed limits does not necessarily equate to considerable increases in journey time.

Beyond the prediction of road trauma, there is evidence that economic parameters to estimate travel time costs can suffer from gender bias by not accurately factoring in mobility patterns and preferences.(20)

m) Is the approach to measuring the impact of policy change appropriate? Where assumptions have been made, do you have any specific alternative assumptions that ought to have been considered? (p64)

There are some broad assumptions presented regarding vehicle ownership per capita, VKT by vehicle type and trip purpose, fuel efficiency changes, and VKT distribution by remoteness and road type. We appreciate the challenges to determine these, given the limited amount of data available to base these on. While there may be cases for arguing that different parameters or different values could have been more appropriate, we consider that on balance they may not have significantly affected the overall conclusions.

Conclusion and Recommendations

The ACRS strongly supports the intent of the RIA, and urges support for the proposed limits of:

- 70 km/h for unsealed roads
- 70 km/h for sealed roads

The ACRS notes there may be resistance amongst the community for this level of change, but is confident there will be significant road safety benefits should these new default speed limits be adopted and properly implemented. Including engagement of the community, across Australia. With trauma rates having increased for the last 4 years in a row (and likely to for 2025 as well), it is essential that evidence-based changes such as this are adopted if we are to have any chance of meeting our 2030 road safety targets.

We also note that the economic analysis of the RIA underestimates the benefits and overestimates the costs of the proposed measure, meaning the resulting benefits as outlined in the RIA are conservative, and likely to be actually far higher.

The ACRS appreciates the opportunity to comment on the RIA and remains committed to supporting Australian governments undertaking major initiatives that contribute towards the ultimate goal of prevention death and serious injury on our roads.

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