



**Attention:**  
**Mr Stuart Wright**  
**Secretary**  
**Legislative Council Select Committee Rural Road Speed Limits**

RACT advocates for the interests of its Members and the wider community of Tasmanian motorists<sup>1</sup>. RACT has a strong interest in ensuring that speed limit policy and practice is robustly determined and its implementation well-executed, as any changes will affect all Tasmanian motorists.

The motoring community pays significant amounts of taxes to governments and expects to receive in return a reasonable level of mobility at an acceptable level of risk within a backdrop of personal responsibility and expects governments to provide the infrastructure and regulatory framework to support both mobility and safety– but not one unnecessarily at the expense of the other.

Members expect RACT to advocate for both mobility and safety: *safe mobility*. The proposal to reduce speed limits on sealed rural roads is a classic case of the tension between mobility and safety concerns.

Reducing speed limits on sealed rural roads, as a way to generate crash cost savings, is viewed by many of our Members as an ineffective, poorly-targeted limitation on the law-abiding majority, who are being overly-penalised for a minority of motorists who exceed the speed limit and/or are involved in speed-related crashes.<sup>2</sup> RACT provides a range of its Members' comments to give them a voice on this issue, illustrating the strong sentiments in the community about the proposal, and respectfully urges Committee members to read those comments.

At the same time, RACT could be viewed by others as irresponsible to *not* support a reduction in speed limit on some stretches of narrow, single-lane, winding Tasmanian rural roads where there may be no prospect of funding to upgrade the safety of those roads through engineering measures.

Whilst acknowledging that lower travel speeds reduce the consequences of a crash (reductions in lower speed limits, such as the urban default to 50 km/h, can lead to substantial risk reduction and crash cost savings) and that infrastructure improvements must be built based on Safe System principles of a more forgiving road environment, RACT retains a skepticism that simply cutting some rural road speed limits from 100 km/h to 90 km/h will actually lead to significant-enough reductions in mean travel

---

<sup>1</sup> See Appendix 1 "About the RACT"

<sup>2</sup> See Attachment 2 for actual comments from RACT Members, collected in a survey in December 2012.



speeds to deliver the Government's claimed savings of "more than 100 people from death or serious injury over the next six years."<sup>3</sup>

A significant proportion of RACT Members are also concerned that any broad-based speed limit reduction program could, in the future, be used as a replacement policy for appropriate investment in road maintenance, repairs and upgrades.

### **Changing limits, changing proposals**

The initial proposal for a blanket speed limit reduction on rural roads from 100 km/h to 90 km/h was first mooted December 2010. In response, the RACT sought comprehensive statistical data regarding crash history and traffic volumes on the 100 km/h sealed roads to be affected by the proposal, as very little had been made available publicly when the Government announced its intentions.<sup>4</sup>

RACT conducted a survey<sup>5</sup> to give its Members a voice on this issue of significant concern to them, as well as an analysis<sup>6</sup> of the data provided by DIER. After analysis of the data and the huge response from Members to the survey, RACT stated it would oppose the proposal and seek a case-by-case assessment approach.<sup>7</sup> When the Government announced in April 2011 (in a media statement no longer available online) that it would modify its proposal, it specifically used the terms the RACT had requested – '*case-by-case*' – and as such, the RACT welcomed<sup>8</sup> the change in approach.

---

<sup>3</sup> Accessed at [http://www.premier.tas.gov.au/media\\_room/media\\_releases/road\\_safety\\_reform\\_to\\_save\\_lives2](http://www.premier.tas.gov.au/media_room/media_releases/road_safety_reform_to_save_lives2)

<sup>4</sup> RACT Media Release 14 January 2011:

"A one-size-fits-all solution, such as a blanket reduction of speed limits, appears to be a simplistic way of trying to deal with a complex problem... the RACT has asked to be provided with a full analysis of Tasmania's serious injury and fatality crashes, and all the factors involved, over a period of five years. In addition the RACT has requested comparative traffic volume data for the major roads that currently operate with a limit of 100 km/h, which could be reduced under the proposal...We believe the public needs further information to help them adequately consider the proposal...The speed limit proposal will have a significant impact on road users, and RACT would be most concerned if it was used as a substitute for adequate and proper upgrading and maintenance of the major road network."

<sup>5</sup> See Attachments 2 and 3

<sup>6</sup> See Attachment 6

<sup>7</sup> RACT Media Release 4 March 2011:

"The RACT's Members have voiced their opposition to a blanket reduction in rural speed limits from 100 to 90kmh... The data supplied by DIER shows that by far the biggest contributor to rural road crashes is driving without due care and attention...RACT believes that targeted improvements to higher-risk roads utilising the AusRAP program is preferable to a blanket speed limit reduction approach."

<sup>8</sup> RACT Media Release 6 April 2011:

"The RACT has welcomed a modifying of the Government's previous approach to rural speed limits. The motoring organisation, whose members have demonstrated a clear rejection of a blanket speed reduction in a one-size-fits-all approach to rural speed limits, says the Minister for Infrastructure's media release today, indicating that any changes will occur on a case by case approach, will be welcomed by all responsible drivers... Rather than a one size fits all cut to rural speed limits, the RACT believes a targeted approach will achieve better safety outcomes, when combined with more enforcement and educational campaigns."



The Government's rural road speed limit reduction from 100 km/h to 90 km/h in the final iteration of the proposal, the *Safer Roads: Non-Urban Road Network Strategy*<sup>9</sup> is based on "harm reduction principles"<sup>10</sup> or a 'human tolerance' approach, and not an infrastructure improvements approach – which forms part of the RACT's speed policy.<sup>11</sup>

The question remains, will a speed limit reduction from 100 km/h to 90 km/h on rural roads **actually prevent any crashes** – or lead to (potentially only) harm minimisation in the event of crashes, and not reductions in KSI statistics.

Research by the International Road Assessment Program (iRAP) and its Australian equivalent AusRAP<sup>12</sup> argues that safer roads and roadsides<sup>13</sup> are vitally important in the safety equation, as much as surviving a crash depends on how well energy is absorbed. iRAP notes that "a collision with a fixed object" or "a head-on collision at speeds greater than 70km/h" will "most likely be fatal." In addition, "a pedestrian or cyclist cannot survive an impact with a vehicle travelling more than 40 km/h" and "a side impact at an intersection will be fatal at impact speeds greater than 40 km/h."

In his announcement<sup>14</sup> 4 September 2012, Road Safety Minister Hon David O'Byrne MP said:

Mr O'Byrne has considered recommendations from the Road Safety Advisory Council (RSAC), and developed a broader strategy for improving safety on non-urban roads.

"Tasmania has recorded the lowest road toll on record for the last two years running, but the number of crashes on non-urban roads is still concerning," Mr O'Byrne said.

"More than 40 per cent of Tasmania's serious road casualties happen on non-urban roads with a 100 km/h speed limit.

"We must act now and use proven research and evidence to protect more lives.

---

<sup>9</sup> Accessed at [http://www.saferroads.tas.gov.au/wp-content/uploads/2012/09/Non-Urban\\_Road\\_Network\\_Strategy.pdf](http://www.saferroads.tas.gov.au/wp-content/uploads/2012/09/Non-Urban_Road_Network_Strategy.pdf)

<sup>10</sup> The KiSS Demonstration was undertaken, via Road Safety Levy funds, to "...implement and evaluate a revised system of rural speed limits based on harm reduction principles" including introducing "a reduction from 100km/h to 90km/h on most sealed rural roads" - Langford, J *Kingborough Safer Speeds Demonstration (KiSS) Evaluation Report after Twenty-Four Months* Monash University Accident Research Centre [MUARC] March 2010 (amended January 2011) executive summary, p2.

<sup>11</sup> See RACT Speed Policy document attached (excerpt below):

"AusRAP research has shown that the greatest gains in road safety will come from improved road infrastructure. Consequently, RACT considers that the first-best approach to providing the community with safe mobility is to improve, where necessary, the engineering or designed safety of roads.

Safety treatments and upgrades to roads and roadsides play a role in preventing a crash and, in the event of a crash, can reduce the severity of the outcome for the road users involved

Crashes are unpredictable events and can occur at any speed limit. A reduced posted speed limit does not mean that crashes would not occur. Infrastructure treatments such as safety barriers (both for roadsides and centre median) can "cushion" the impact should a driver make a mistake.

<sup>12</sup> Visit [www.irap.net](http://www.irap.net) and [www.ausrap.org](http://www.ausrap.org) for more information on the RAP programs

<sup>13</sup> See <http://www.ausrap.org/ausrap/howtosavelives.htm>

<sup>14</sup> Accessed at [http://www.premier.tas.gov.au/media\\_room/media\\_releases/road\\_safety\\_reform\\_to\\_save\\_lives2](http://www.premier.tas.gov.au/media_room/media_releases/road_safety_reform_to_save_lives2)



"The measures in the *Safer Roads: Non-Urban Road Network Strategy* could help save more than 100 people from death or serious injury over the next six years," he said.

The DIER strategy paper *Safer Roads: Non-Urban Road Network Strategy* states that Tasmania has 14,500km of 'non-urban roads' and that 11,000km of these roads are subject to a speed limit of 100 km/h.<sup>15</sup> It follows that with nearly three-quarters of non-urban roads subject to a 100 km/h limit – and higher speed zones generating necessarily higher crash risks (laws of physics) – crashes on these roads *will* make up a substantial number in the overall total crashes.

Despite the Government's recourse to "proven research and evidence"<sup>16</sup> as the basis for the *Safer Roads: Non-Urban Road Network Strategy*, the evaluation of the key research project to establish an evidence base – the *Kingborough Safer Speeds Demonstration* – was inconclusive.<sup>17</sup>

The Government is basing its potential crash savings in part on a theoretical basis: Nilsson's 'power model' which is quoted<sup>18</sup> throughout the reports, written by the MUARC team for DIER<sup>19</sup>.

This theoretical approach makes one significant assumption: that to realise any projected crash savings from speed limit reductions, the speed limit changes must translate into behaviour changes – that is, drivers need to reduce their actual driving speeds on roads that have had a new speed limit applied to them and the overall 'mean travel speeds' need to reduce, km/h by km/h, for the risk reductions to actually occur. See, again, the inconclusive nature of the *KiSS Evaluation Report*. In fact, one conclusion that may be drawn from the KiSS demonstration is a lack of credibility in a 90 km/h reduction approach. It is also absolutely of interest to note that in the original draft MUARC Report, the initial speed limit reduction proposals were to reduce selected 100 km/h roads to 80 km/h, and 110 km/h roads to 100 km/h.<sup>20</sup>

---

<sup>15</sup> Accessed at [http://www.saferoads.tas.gov.au/wp-content/uploads/2012/09/Non-Urban\\_Road\\_Network\\_Strategy.pdf](http://www.saferoads.tas.gov.au/wp-content/uploads/2012/09/Non-Urban_Road_Network_Strategy.pdf) page 5

<sup>16</sup> Ibid.

<sup>17</sup> See Attachment 4 Kingborough Safer Speeds Demonstration [KiSS] Inconclusive.

As a related matter, the RACT remains opposed to the open-ended continuation of reduced default speed limits in the two municipalities involved (Kingborough and Tasman) which is pre-emptive of the policy change implementation; and is absolutely confusing and unfair (and an enforcement trap) for motorists in these areas.

<sup>18</sup> See Corben et al (MUARC) January 2008 (version 5) *The Impact of Lowered Speed Limits In Urban and Metropolitan Areas* page 8 figure 1; or Corben and Johnston (MUARC) 2006 *Development of Future Directions for Tasmanian Road Safety Strategy 2007-2011: Stages 1 & 2* page 103-104

<sup>19</sup> See Attachment 7 The theoretical basis of speed limit reduction crash savings.

<sup>20</sup> Corben and Johnston (MUARC) 2006 op. cit., page 103 (**emphasis added**):

**"For the proposals made in this report, namely, reducing speed limits from 100 km/h to 80 km/h on selected roads and from 110 to 100 km/h on other roads**, it has been assumed, somewhat conservatively, that the former option will produce a 10% reduction in mean speed and the latter option a 5% reduction in mean speed (rather than a 20 and 10 km/h drop in mean speed, respectively). Under these assumptions, Nilsson (1982) predicts:

- a 34% drop in fatalities and a 27% drop in serious injuries from reducing speed limits from 100 km/h to 80 km/h on selected roads, and



Any public policy or regulation must be credible, logical and be able to be effectively administered and enforced where required, to succeed. The RACT's surveys<sup>21</sup> of its Members, conducted in 2011 and 2012, show **there is a significant lack of support in the community** for a reduction in speed limits on 100 km/h roads to 90 km/h, especially in many rural and regional areas.

Only 20% of respondents supported the Government's proposal to cut the rural default speed limit to 90 km/h in the RACT's February 2011 survey; and the figure was only slightly higher at 21% in the RACT's December 2012 survey.

To the 2011 survey question: *If you could improve just one thing to reduce the number of serious crash incidents on rural roads what would that be?* only 6% of respondents nominated 'speed limit reductions'.

Credibility of the proposed speed limits is very important. If motorists don't believe that cutting speed limits by 10 km/h on these roads is required; or that reductions won't help reduce the road toll, then it follows that actual compliance levels will be far lower than projected in the theoretical approach, and this will negatively impact the modeling used to predict crash savings to be achieved.

In addition, with recent cuts to Tasmania Police resourcing, it is far less likely that required enforcement levels<sup>22</sup> can be maintained to ensure no erosion of potential crash cost savings.<sup>23</sup> RACT has received substantial feedback from members in the past twelve months that leads to an overall conclusion that a "visible police presence" on Tasmanian roads has significantly reduced, in correlation to the Budget cuts to Tasmania Police. The Committee would be best-placed to seek evidence from suitable Tasmania Police witnesses as to any reductions in the operating hours of high-visibility police vehicle patrols - especially on 100 km/h roads – to confirm RACT's view.

- 
- a 28% drop in fatalities and a 14% drop in serious injuries from reducing speed limits from 110 to 100 km/h on other roads.

<sup>21</sup> See Attachments 1 & 3 for survey results

<sup>22</sup> Corben and Johnston (MUARC) 2006 *Development of Future Directions for Tasmanian Road Safety Strategy 2007-2011: Stages 1 & 2* page iii (**emphasis added**)

"Reducing urban travel speeds and reducing speeding and upgrading infrastructure on roads with high crash numbers (typically high speed, high traffic volume roads) are likely to produce the biggest payoffs because they will address all of the priority areas in Tasmania. Implementation of these initiatives must be supported by high levels of enforcement and publicity of the speed initiatives proposed in this report (and indeed other initiatives such as drink-driving countermeasures) **if maximum safety gains are to be achieved. It is, therefore, proposed that current levels of enforcement and publicity are increased, or at least maintained at current levels, to achieve this.**"

<sup>23</sup> Ibid, page 92:

"...certain initiatives are unlikely to produce their full benefits unless supported by current or increased levels of enforcement and education in Tasmania. For example, implementation of lower speed limits is unlikely to bring about maximum reductions in serious casualties unless supported by appropriate high levels of enforcement and publicity."



## **Other matters related to the Inquiry's terms of reference.**

An analysis conducted by RACT<sup>24</sup> of a five-year DIER crash data set in early 2011 showed that by far the biggest contributor to rural road crashes is driving without due care and attention, followed by drugs and alcohol usage. Exceeding the speed limit is one of many factors identified in rural road crashes but is not as prevalent as factors related to driving with a lack of due care and attention.

Speed limit reductions should also be clearly viewed as only one way of reducing crashes. Factors involved in serious casualty crashes other than speed are just as, or more, important – despite speed being referred to as an ‘aggravating’ factor in crashes (meaning that higher travel speeds, in the event of a crash, will lead to the worsening of the effects of the crash). It must be put, however, that just cutting speed limits alone will not reduce alcohol, substance or fatigue impairment; distraction and inattention; errant driving behaviour; poor driving skills; or poor decision-making.

An assessment of any similar mass speed limit reductions in Tasmania should also be examined as part of this Inquiry. It should be of interest to the Committee that no evidence has been made publicly available regarding a previous broad-based speed limit reduction – that of the default open road limit of 110 km/h to 100 km/h in Tasmania – and its effect on reducing serious casualties.

## **Speed limits must have broad community acceptance and credibility**

RACT's policy is opposed to any blanket speed limit reduction proposal based simply on human tolerance<sup>25</sup> and considers that a case by case assessment and analysis approach is preferable. This does not preclude a “Safe System” approach to defined shared spaces and is why RACT policy supports the urban default 50 km/h limit and more recently RACT has supported a variety of speed limit reduction proposals in lower-limit, high-risk or mixed-use areas.

In spite of the inconclusive nature of the KiSS Evaluation Report, the subsequent ARRB Reports commissioned by DIER to develop speed limit criteria referred to the Demonstration as a “success”:

“On the basis of the success of this trial in March 2011, the RSAC has recommended that the Tasmanian default rural speed limit be reduced by 10 km/h. This would result in a 90 km/h limit on all sealed rural roads.”<sup>26</sup>

---

<sup>24</sup> See Attachment 6 What factors and conditions are involved in 100 km/h road crashes?

<sup>25</sup> If speed limits should be set simply on human tolerance grounds, then what special speed limits should apply to motorcycles?

<sup>26</sup> ARRB “Development of potential new criteria for the application of the 100 km/h speed limit on rural roads in Tasmania – Report 1 of 2” page 1





Instead of assessing sections of road for risk and potential treatments (including speed limit reductions) 'criteria' or benchmark characteristics for a 100 km/h speed limit road in Tasmania were developed.<sup>27</sup> The subsequent process, therefore, has been more about assessing whether non-urban roads have "an appropriate speed limit" and fitting roads into this definition of what constitutes a 100 km/h road across Tasmania – as opposed to a true 'case-by-case' consideration of 100 km/h roads (and sections or 'links' thereof) with assessed higher risk profiles that potentially could have their speed limit reduced, in concert with other engineering treatments: which is the approach that RACT has advocated from the beginning of this process.

The RACT expressed qualified support<sup>28</sup> for the Government's policy approach that there may be a case for reducing speed limits on some lower-volume roads that would receive no upgrade funding in the short-medium term, in line with a Safe Systems or 'human tolerance' approach. This was not, and is not, support for a part-blanket speed limit reduction for large numbers of rural roads that are unable to meet a pre-determined set of criteria. If it is clear that there is no funding and no engineering treatments are likely to occur in the foreseeable future (or are not physically possible) then lower speed limits should be considered; but only as an interim measure until possible treatments are undertaken. But reduced speed limits should be justified, in each case, rather than just taking a blanket approach; and roads with reduced limits should be prioritised for upgrades to make them safer as soon as possible.

"Experience and research has demonstrated that arbitrarily imposed speed limits that are too low attract poor levels of compliance regardless of the level of enforcement. Ideally, limits should be set such that road users can readily understand the reasons for setting them at a particular level. The limits will then be more likely to be voluntarily observed by the majority of motorists... The speed limit shall not be so low that a significant number of drivers will not be able to understand the reason for it and hence tend not to observe it."<sup>29</sup>

---

<sup>27</sup> Rather than inventing a new classification system for 100 km/h roads in Tasmania and defining them as "high", "medium" or "low" standard, roads could be assessed using an existing arm's-length measurement tool such as the AusRAP or iRAP risk measurement protocols, and one star (unsafe) to five star (safe) safety rating system using visual inspection coding and safety ratings of the roads (and not just individual and collective risk desktop measurement in isolation) – as recommended by RACT for a number of years.

The Top 10 or 20 highest-risk 100 km/h roads – based on relative risk – could then be analysed and treatment plans designed (which more than likely would include some targeted speed limit reductions).

See *Engineering a Safer Future: EuroRAP results 2012* where the top 10 roads with the biggest reductions in risk and best crash reduction outcomes were treated with a mix of engineering measures **and** speed limit changes/reductions. Accessed at [http://roadsafetyfoundation.org/media/27979/engineering\\_a\\_safer\\_future.pdf](http://roadsafetyfoundation.org/media/27979/engineering_a_safer_future.pdf)

<sup>28</sup> RACT Media Release 4 September 2012 "RACT qualified support for rural road reforms"

<sup>29</sup> Standards Australia AS 1742 *Manual of Uniform Traffic Devices-Speed Controls* 2008 section 4



Unless there is community acceptance and overwhelming community compliance with any new reduced speed limits, the change will not deliver the predicted social cost savings.<sup>30</sup>

### **RACT concluding opinions**

The proposed rural road speed limit reduction from 100km/h on sealed roads highlights the tension between *mobility* and *risk*. The RACT's Members expect it to champion *safe mobility*. RACT has given the proposal qualified support on the basis that it could appear irresponsible, or accepting of too higher level of risk, to *not* support a potential reduction in speed limit on *some* stretches of narrow, single-lane, winding rural roads where there is little prospect of funding to upgrade the safety of those roads through engineering measures, warning signage, better delineation or other measures – if comparatively high risks have been identified on these roads or links.

A broad-based, “mass treatment” or ‘blanket’ approach to cutting speed limits on rural roads needs substantial community acceptance, and needs to be seen as credible, to enable any chance of achieving projected crash cost savings claims. From RACT's member feedback, this requisite credibility is in doubt with respect to the Government's proposed rural road speed limit reduction from 100km/h on sealed roads.

The RACT remains concerned that the evaluation of the key report used as evidence for this proposal – the KiSS evaluation – is inconclusive at best; and does not support the theoretical modeling. This KiSS Evaluation report should be far more widely communicated to the communities affected by the proposals.

The proposed speed reduction measures in the Government's *Safer Roads: Non-Urban Road Network Strategy* do not equate to the RACT's initial support for a “case-by-case” assessment or a “targeted approach based on safety criteria”. The process has been more about fitting roads into a definition of what constitutes a 100 km/h road, across Tasmania – as opposed to a true ‘case-by-case’ consideration of 100 km/h roads (and sections or ‘links’ thereof) with higher risk profiles that potentially need to have their speed limit reduced, in concert with other engineering treatments.

Despite the Government's claim that “The measures in the *Safer Roads: Non-Urban Road Network Strategy* **could help save** more than 100 people from death or serious injury over the next six years” (emphasis added) if implemented it appears more likely, due to a number of factors, that any slight reductions in actual travel speeds achieved will lead to *some* corresponding slight reductions in the physiological effects of *some* crashes (nonetheless welcome).

The RACT also remains concerned that if implemented, this broad-based speed limit reduction program could be used, in the future, to justify an approach whereby speed

---

<sup>30</sup> An RACT associate in the Automobile Association New Zealand (AA) commented that “Speed limits are not a tool to adjust attitudes to transport safety.”





limit reductions simply become a low-cost replacement policy for appropriate investment in sensible safety upgrades based on risk assessments, using well-tested case-by-case methodologies like those enshrined in AusRAP and the Black Spot Safety programs; or as a justification for reductions in funding for road surface and delineation renewal, and other vital road maintenance tasks.

Ends

22 January 2013

**Enquiries:**

Vince Taskunas  
General Manager Communications and Marketing  
RACT Ltd

e: [v.taskunas@ract.com.au](mailto:v.taskunas@ract.com.au)

m: 0417 005 647

web: [www.ract.com.au](http://www.ract.com.au)

T: @RACTOfficial