

## **Community Acceptance of Lower Speed Limits**

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### **Abstract**

In 2009 RACV commissioned exploratory work under the auspices of the RACV Road Safety Research Fund, to better understand attitudes towards speeding and approaches to setting speed limits. This work was expanded in 2010/2011 through quantitative market research. This paper presents the results of this quantitative market research and explains the relevance of the results in the context of factual research related to speed and its impact on safety. The results show that there is incomplete community understanding about what constitutes 'speeding'. Victorians mostly define speeding as exceeding the speed limit by more than 10 per cent, particularly for protracted periods of time. Most Victorians claim to speed, if only at low levels occasionally. Most admit to speeding unintentionally, although a sizeable proportion of motorists also admit to intentional speeding behaviours. When drivers perceive that safety demands a lower speed, they will slow down (for example in bad weather or high pedestrian activity). While there is a high level of support for the current speed limits, there is resistance to further reductions. Victorians are more receptive to targeted zones with reduced speed limits rather than broader general reductions.

### **Keywords**

Speed behaviour, speeding, community attitudes, safe system speed limits, road safety.

### **Introduction**

Mobility is a critical issue for RACV members. While mobility encompasses more than just travel speed, members often use speed (or the associated measure of travel time) as a proxy measure of their ability to move freely around the road network. RACV has been tracking member and motorist attitudes to speed since 2005, as have government agencies. There is, however, very little published material on community attitudes and no substantive public debate about speed and speeding which is not related to 'hoon behaviour' or perceptions of revenue raising.

In 2009 RACV commissioned exploratory work under the auspices of the RACV Road Safety Research Fund, to better understand attitudes towards speeding and approaches to setting speed limits. This qualitative work indicated clearly that there is a near consensus of opinion about the antisocial nature of excessive speeding (10+ km/hr over the speed limit), a range of views on low-level speeding (<10km/hr over the speed limit), and very little understanding of the context in which speed limits are set.

RACV built on this work in 2010/2011 through quantitative market research. This paper presents the results of this quantitative market research and explains the relevance of the results in the context of factual research related to speed and its impact on safety.

## **Market research methodology**

The methodology used for this project was quantitative in its approach, consisting of 1,000 computer assisted telephone interviews (CATI) with Victorian drivers. The sample used was extracted from the market research industry managed telephone number database. The methodology of telephone interviewing was used, as it allows for a good cross-section of the Victorian community to be reached. It is also the methodology of choice for most longstanding studies on road safety matters, allowing comparability with other results.

The questionnaire was developed and undertaken by Wallis Consulting Group. A pilot study of 30 interviews was conducted to identify any issues with the questionnaire. Interviewing for the main study took place in July 2010. Given that attitudes and behaviour towards speeding were likely to differ with age, quotas were put in place and for similar reasons, gender quotas were enforced so that the final sample was a representative reflection of the Victorian community (45 per cent males and 55 per cent females). Although there were no quotas in place for location, this was monitored daily to ensure that interviews were broadly representative of the Victorian population base, namely 67 per cent of interviews were conducted with respondents living within the Melbourne Metropolitan area with the remainder (33 per cent) being outside the Metropolitan areas.

Market research of this type poses a number of methodological challenges related to questionnaire design, data weighting and avoidance of social desirability bias<sup>1</sup>, over and above those commonly encountered in attitudinal surveys. To ensure this work adhered to the best available research standards, the survey methodology proposed by Wallis was independently peer-reviewed by an expert specialising in this field.

## **Speed and its impact on safety**

Vehicle speed influences both the likelihood of a crash occurring and its severity. Speed is therefore a critical aspect of managing a safe road system and the safety of a road cannot be understood without the knowledge of the traffic speeds.

Speed limits are the proxy management tool for managing vehicle speeds, but by no means the only one. Road engineering both influences behaviour (e.g. narrow lanes) and controls speeds (e.g. roundabouts); education campaigns create awareness and attempt to influence attitudes/behaviours towards speed (e.g. TAC 'wipe off 5'); and enforcement, through fixed and mobile speed cameras, provides incentive to drive within the speed limit. All of these are critical tools for speed management.

Understanding community attitudes towards speed management, particularly towards speed limits, is critical. The views of the vocal minorities at both extremes of the debate have been clear for some time. What is not well-understood, however, is how representative these views are of the majority of motorists. This section of the paper briefly discusses various aspects of speed before providing an insight into associated community views.

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<sup>1</sup> Biases towards socially acceptable responses, not necessarily a result of conscious decision making on the part of the participant.

### **Speed as a risk factor**

Speed has been identified as a key risk factor in road traffic injuries. Higher speeds lead to a greater risk of a crash and a greater probability of serious injury if one occurs. While some issues have been raised about the magnitude of the relationship between higher vehicle speeds and *crash involvement* (RACV, 2004), the research body provides clear evidence that the link exists.

The relationship between travel speed and *injury severity* is even more strongly demonstrated. The probability of injury, and the severity of injuries that occur in a crash increases, not linearly, but as the exponent of vehicle speed (by a factor of four for fatalities, three for serious injuries, and two for casualty crashes). Even small increases in travel and impact speed results in a great increase in the forces experienced by vehicle occupants and other road users.

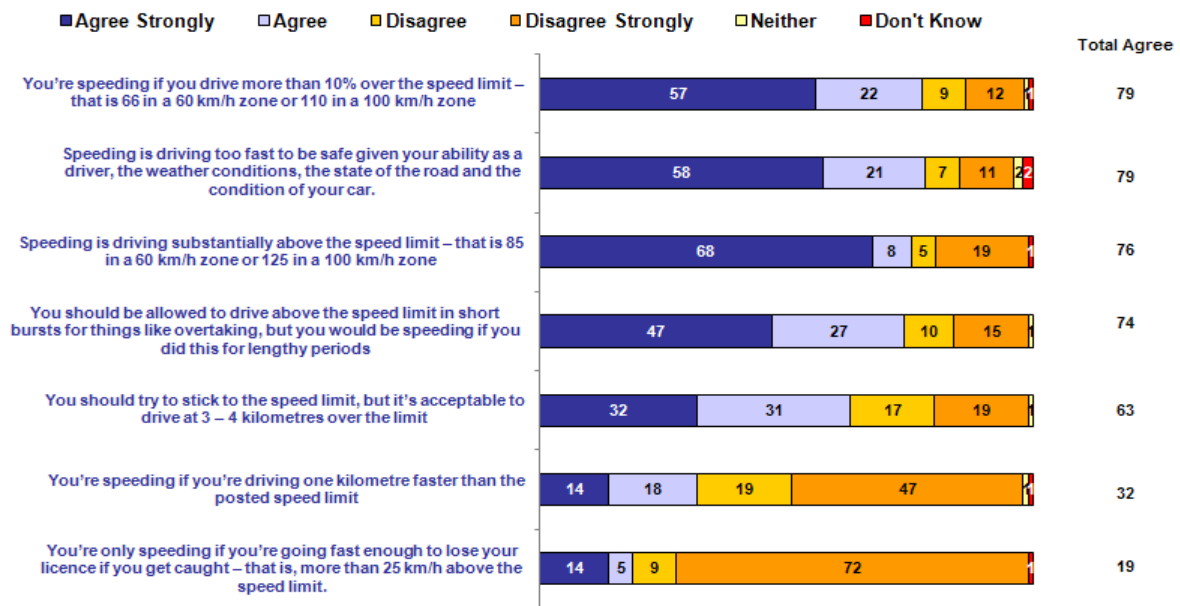
Vulnerable road users such as pedestrians, cyclists, motor-scooter riders and motorcyclists have a high risk of severe or fatal injury if a motor vehicle collides with them. This is because they are often completely unprotected or, in the case of a motorcyclist, have very limited protection. For example, the probability that a pedestrian will be killed if hit by a motor vehicle increases dramatically with speed, with research indicating that while most pedestrians can survive if hit by a car travelling 30km/h, the majority will be killed if hit by a car travelling at, or above, 50km/h.

For car occupants, wearing seat-belts and driving well-designed cars can generally provide protection to a maximum of 70 km/h in frontal impacts, and 50 km/h in most side impacts. The likelihood of a fatal crash outcome for run-off-road into a fixed object crashes where the side of the vehicle impacts a solid object such as a tree or pole, is substantial for travel speeds greater than 60 km/h.

Higher speeds could be tolerated if the interface between the road infrastructure and vehicle were well designed and not likely to result in a fatal outcome in the event of driver error (for example crash barriers). Most existing road systems, however, allow much higher speeds without adequate protective measures such as barriers between vehicles travelling in opposite directions and between vehicles and roadside objects.

The link between speed and risk is not well understood in the community, to the extent that there is not even a common understanding of what 'speeding' constitutes. Respondents were asked the extent to which they agreed with seven statements related to speeding behaviours. As Figure 1 shows, the results suggest that the majority agreed that speeding relates to driving more than 10 per cent over the posted speed limit for protracted periods (79 per cent). They are less likely to agree that driving faster in short bursts - for example when overtaking- (74 per cent) or that travelling up to three or four kilometres over the limit is speeding.

Only one third of motorists, from all walks of life, agreed that even driving one kilometre over the limit is speeding. However, at nearly eight in ten, a higher proportion agrees that driving more than 10 per cent over the posted limit is speeding. A similar proportion agrees with the proposition that *Speeding is driving too fast to be safe given your ability as a driver, the weather conditions, the state of the road and the condition of your car* and this view is held consistently across most respondent types; however, nearly nine in ten people living outside Melbourne (85 per cent) agree with this compared with just under eight in ten Melbournians (75 per cent).

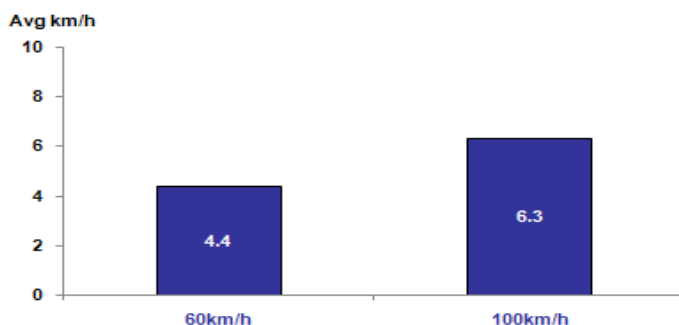


Q6. To what extent do you agree or disagree with the following statements... (n=1000)

Figure 1: Definition of speeding

People living outside Melbourne are also much more likely to agree that speeding should be allowed in short bursts (82 per cent compared with 70 per cent of Melbournians), possibly because the need to overtake using the other side of the road is more prevalent outside of Melbourne. Women generally take a harder line on all definitions of speeding than men, with higher percentages (and significantly so for most statements) agreeing with definitions of speeding and lower proportions agreeing with the extent to which speeding should be tolerated. For example, eight in ten men (78 per cent) agree that they should be allowed to drive over the speed limit in short bursts for such things as overtaking compared with seven in ten (70 per cent) women.

Respondents were also asked to suggest the speed at which they consider themselves to be speeding. The results (Figure 2) suggest that drivers apply a tolerance of around 5km/h above the limit, irrespective of the speed limit; however this amount is relative, not absolute, and thus increases slightly at higher speed. Those mostly likely to think that they would be speeding if they were over the limit at all are more likely to be older and/or female. Average speeds given by people aged 18 – 24, those on learner or provisional licences and by men are higher than for other population groups at approximately 65km/hr and 108 km/hr respectively



Q7/7a. Regardless of what the law is, how fast would you have to be driving in a 60/100 km/h zone before you're considered yourself to be speeding? (n=1000)

Figure 2: How much above the posted limit is 'speeding'?

### The impact of small changes in mean speed

The likelihood of fatal and serious injuries occurring in the road transport system can rise and fall significantly with small changes in mean speed. Relatively small mean speed reductions can lead to major fatal (and to a lesser extent, other injury) crash reductions. Many experienced drivers are surprised when made aware of the serious casualty crash reductions available through small mean traffic speed reductions. Table 1 indicates the potential reductions in fatal crashes when mean speeds reduce by two kilometres per hour (derived from the Power model by Aarts and van Schagen, 2006). As an illustration, if mean speeds reduced from 100km/h to 98km/h, a reduction in fatal crashes of 7.8 per cent could be expected, all else being equal. Actual changes on a particular road will depend on a range of factors, including the safety of the road infrastructure, roadside activity and traffic mix.

Table 1: Application of the Power model for different reference speeds when the mean speed is reduced by 2 km/h

Crash type	Reference speed in km/h							
	50	60	70	80	90	100	110	120
All injury crashes	7.8	6.6	5.6	4.9	4.4	4.0	3.6	3.0
Fatal and serious crashes	11.5	9.7	8.3	7.3	6.5	5.9	5.4	4.9
Fatal crashes	15.1	12.7	10.9	9.6	8.6	7.8	7.1	6.5

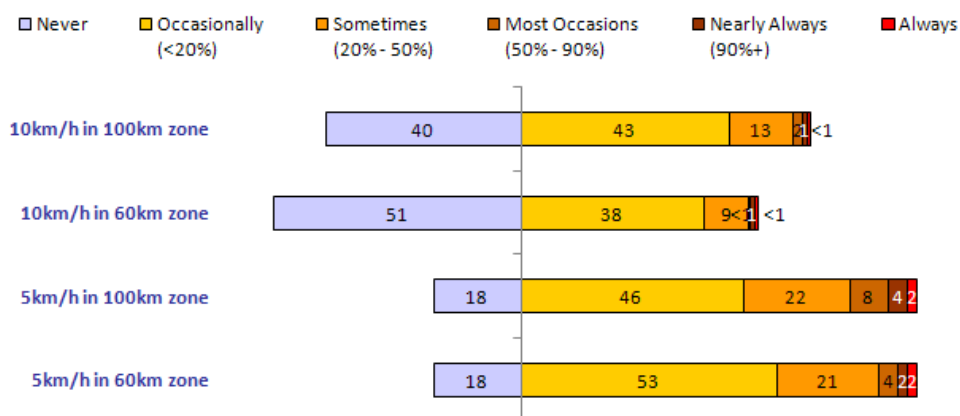
In Australia, work undertaken by Kloeden (1997) has formed the basis of numerous state and local road safety strategies, and implies that:

- Travelling at speeds 5km/h above a speed limit of 60km/h in urban areas and 10km/h above a speed limit of 100 km/h in rural areas doubles the casualty crash risk and
- This increase in risk is comparable to driving with a blood alcohol concentration of 0.05 g/100 ml compared to a zero level.

These figures are not intuitive to the vast majority of motorists because the probability of being in a serious injury crash for any given trip is extremely low. While it is true that if an individual drives at a slightly lower speed, the risk of a crash is reduced, it is being reduced from a very small number to begin with. The summation of this reduced risk across the entire driving population is a real and measureable community benefit, but is not apparent to individual motorists.

Drivers were asked to estimate how often they drive up to 5km/h or 10km/h over the speed limit in 60km/h zone. They were later asked the same questions in relation to driving in a 100km/h zone. Figure 3 shows that:

- The proportion of people who say they never drive 10km/h over the limit is more than twice as high as those who would never drive 5km/h over the limit.
- Over half of motorists claim never to drive 10km/h over the limit on a road with a posted speed limit of 60km/h. This figure drops to four in ten when applied to a 100km/h road.
- Most claim to drive over the limit occasionally (less than 20 per cent of the time)
- One in ten claims to drive up to 5km/h over the limit irrespective of the posted limit sometimes (20 – 50 per cent of the time).
- The proportion that claims to drive over the limit on most occasions is small, and much smaller at the higher posted speed limit.



Q8/8a/10/10a. In the last two years how often have you exceeded the limit by 5/10 in a 60/100km/h zone? (n=1000)

Figure 3: Frequency of exceeding speed limit by 5 km/h or 10 km/h

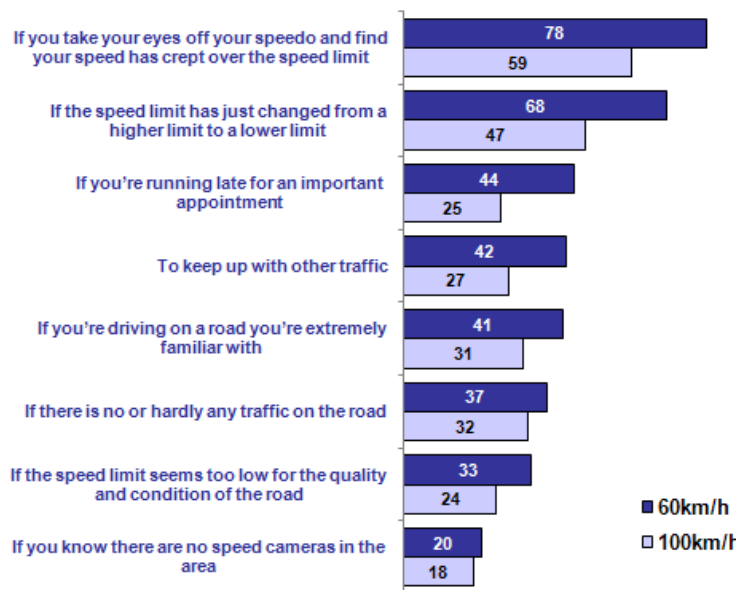
In all instances, men are more likely than women to claim to drive over the speed limit and conversely more women than men claim never to drive over the posted speed limits. People aged 18 – 24 are the most likely to admit to driving habitually up to 5 km/h over the limit in a 100 km/h zone with one in six (17 per cent) saying they do this most of the time (50 – 90 per cent of the time). Only one in ten people within this age group (nine per cent) say that they never drive 5 km/h above a 60 km/h limit, and one in six (17 per cent) say they never drive 10 km/h above the limit on a road zoned at 100 km/h.

Distance is also a determining factor, with people who drive the highest kilometres (more than 50,000 kilometres per annum) being the most likely to say they nearly always (90 per cent of the time or more) drive up to 10 per cent over the posted limit (eight per cent say they drive up to 5 km/h over a 60 km/h limit and 10 per cent say they drive up to 10 km/h over a 100 km/h limit). People living outside Melbourne are more likely to admit to driving 10 km/h over the limit in a 100 km/h zone. Over half (51 per cent) said they do this occasionally and a third (32 per cent) said they never do this (compared with 39 per cent and 44 per cent of Melbournians respectively).

Motorists were read a list of eight circumstances and asked whether they had driven 5 km/h in a 60 km/h zone or 10 km/h in a 100 km/h zone over the limit in these circumstances in the last two years. They were asked to give a simple “yes” or “no” response.

Figure 4 shows that most drivers admit to travelling at these speeds inadvertently, that is, where they “took their eyes off their speedo and found their speed had crept up”. Nearly eight in ten motorists admitted to this happening at 60 km/h and six in ten at 100 km/h. Similarly, changes in speed limits caught the majority out at lower speeds (68 per cent) and almost half of motorists (47 per cent) on 100 km/h roads.

The fact that these proportions are substantially higher than would be expected given the number of motorists who claim never to speed, suggests that these circumstances are not regarded as speeding by some, and also that proportion of the population who actually travels above the posted speed limit is higher than the proportion who admits to it.



Q9 /11. In the last two years, have you driven up to 5 km/h over the limit in a 60/100km/h zone? (n=1000)

Figure 4: Circumstances in which low level speeding has occurred

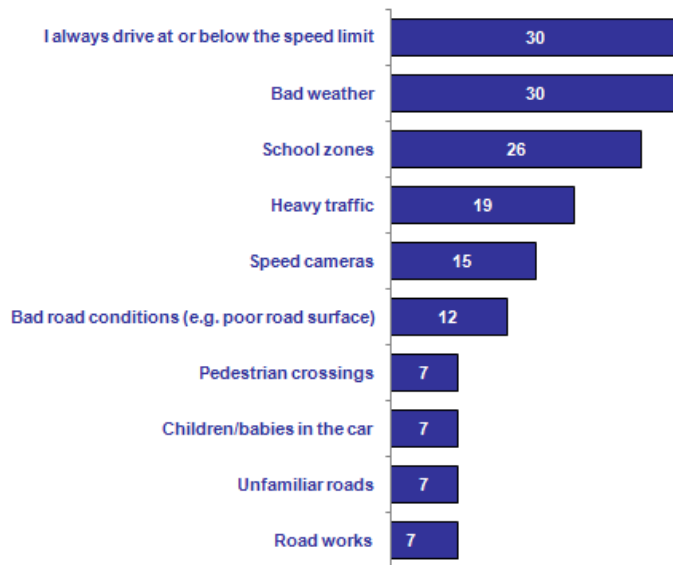
Less than half of motorists claimed to have driven up to 10 per cent over the speed limit as a result of the other six circumstances. However a clear pattern emerges:

- Drivers aged 18-34 were more likely to drive over the limit as a result of these circumstances in every scenario and significantly more likely to do so for most of them;
- People on learner permits and provisional licences were significantly more likely to speed:
  - if late for an appointment;
  - on quiet roads;
  - on roads they are familiar with; and at the lower speed limit (e.g. 60 km/h); and
  - as a result of speedo creep.
- Drivers travelling the furthest were more likely than others to speed where no speed cameras were known to be present, on quiet roads and on roads they are familiar with.
- People living outside Melbourne are more likely than their urban counterparts to drive 10 km/h over the limit on roads they are familiar with.
- Men are more likely than women to speed to keep up with other traffic.

Drivers were asked to consider circumstances in which they would make a conscious effort to remain within the speed limit. As Figure 5 shows, three in ten drivers claim to always drive below the limit and similar proportions also say that bad weather and school zones motivate them to keep to the limits. One in twenty motorists drive below the limit in heavy traffic and a slightly lower proportion is motivated to watch their speed in areas where speed cameras are located.

There are some variations within individual groups. Women are more conscious of school zones, driving with children in the car and on unfamiliar roads. Men are more conscious of the speed limit in heavy traffic and where road conditions are judged to be poor. Those aged 18-24 are twice as conscious of their speed in the vicinity of speed cameras than people aged 60 and over, whereas people aged 25-39 are more conscious of driving with children in the

car and in school zones. People aged 60 or over are twice as likely to say that they always drive below the limit compared with motorists aged up to 24.



Q12. I'd like you to think about times when you would make a conscious effort to drive at or below the speed limit. (n=1000)

Figure 5: Circumstances in which speed limit would be observed

People living outside Melbourne are less likely to make a conscious effort to drive under the limit in school zones, where there are speed cameras and in pedestrian zones than Melbournians.

These results are broadly in line with those obtained to a similar question asked five years ago<sup>2</sup>. A quarter of respondents (25 per cent) had been booked for speeding in the previous two years. Not surprisingly, the more a person drives the more likely this is to happen and a third of people who drive over 20,000 kilometres per annum (34 per cent of people driving 20-50,000 kilometres and 32 per cent of people driving greater distances) had been booked. Nonetheless, motorists living outside Melbourne are less likely to have received a speeding ticket (21 per cent versus 27 per cent of Melbournians). One in a hundred motorists had lost their licence for a speed related offence.

### **Antisocial behaviour**

The TAC has recently published some work on the relative unacceptability of a range of antisocial behaviours (TAC 2010a). This found that:

- Six of the top ten antisocial behaviours ranked by Victorians related to motoring, with matters related to drink and drug driving being rated the most unacceptable. None of these related to speeding, with the highest ranked of the speeding behaviours being to exceed a 60 km/h zone speed limit by more than 10 km/h (ranked 34). This was considered to be less acceptable than exceeding a 40 km/h limit by 10 km/h (ranked 36) or

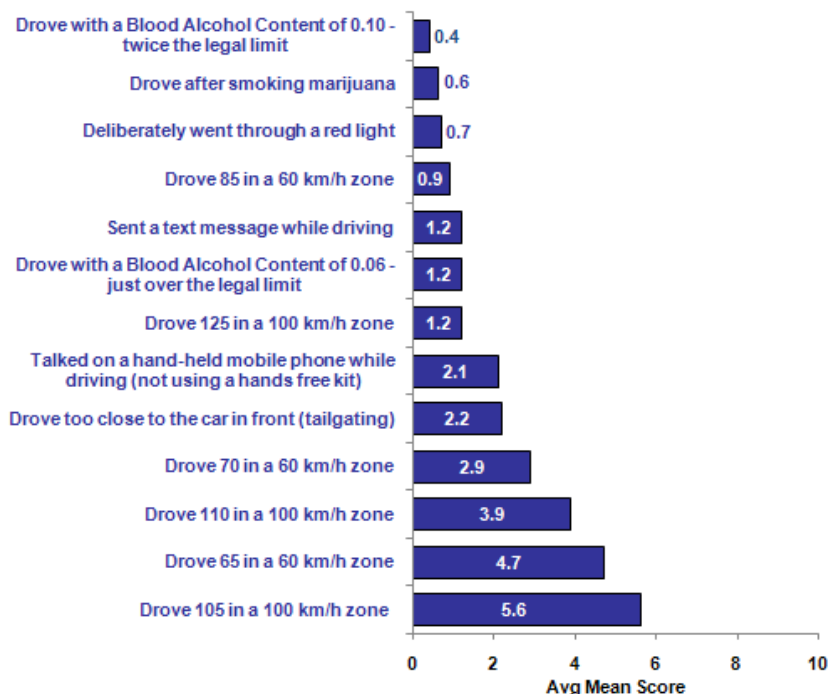
<sup>2</sup> Project Speed – Wallis Consulting Group for RACV, 2005. The question asked was “are there any situations you can think of when you would definitely drive on 60/100km/h zoned roads at or below the speed limit” However it was only asked of regularly speeding motorists, whereas everyone was asked the slightly different question in 2010.



a 100 km/h limit by the same amount (ranked 41). Antisocial behaviours became less acceptable as the age of respondents increased.

- Almost half of Victorians considered it acceptable to warn other drivers of the location of speed cameras and only one in ten considered this practice unacceptable.
- Following on from this, the TAC published the findings of a qualitative study in regional Victoria that sought to understand these findings in more detail. This showed that a high proportion of Victorians admit to low level speeding (exceeding the posted limit by up to 10 per cent), yet they acknowledge the danger of doing so and are clearly prepared to offset the risk against potential perceived benefits (TAC 2010b).

The results of RACV’s market research support the TAC findings. Respondents were read out a list of thirteen driving behaviours and were asked to rate each one on a 10 point scale as to how they think their friends and family would react if they displayed such behaviour. Figure 6 details each of the thirteen behaviours, in ascending order of acceptability (i.e. from lowest to highest with the least acceptable shown first).



Q13. How would people you know react if they knew you had....? (n=1000)  
Using a 10 point scale where 0 means they would find your action totally unacceptable and 10 means that they would find it totally acceptable.

Figure 6: Reactions to driving behaviours

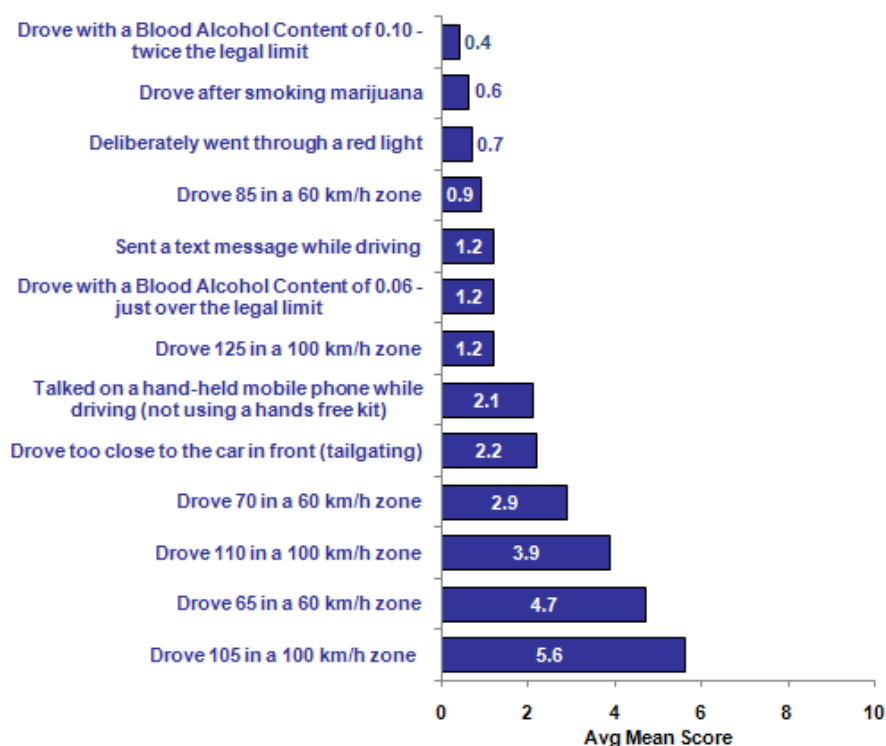
Clearly the message about driving when impaired has reached motorists. In line with findings from the TAC study, RACV’s results show that driving under the influence of drugs and alcohol are considered the most unacceptable behaviours, more so than speeding.

This finding directly correlates with the TAC’s conclusions from the Social Acceptability Research:

*“When it comes to speeding, this survey shows that there is still a way to go before we reach the same levels of social unacceptability that we see with drink driving and drug driving”.*

Drivers have a very low tolerance towards drink drivers with a blood alcohol level of 0.10 (average score given here was 0.4), with women significantly more likely to declare this behaviour unacceptable than men; this is closely followed by marijuana impaired drivers (average score of 0.6) with motorists aged over 60 even more likely than motorists aged 25 to 39 to find this unacceptable.

At the bottom end of the scale, drivers are more inclined to regard driving 105km/h in a 100km/h zone much more acceptable – overall, respondents gave an average rating of 5.6. This behaviour is more acceptable amongst drivers aged under 60, drivers who are not working full time or part time, and high income earners (i.e. household income over \$100,000).



Q13. How would people you know react if they knew you had....? (n=1000)  
Using a 10 point scale where 0 means they would find your action totally unacceptable and 10 means that they would find it totally acceptable.

Figure 6: Reactions to driving behaviours

Respondents were later asked for their views on the cost of speeding to the community versus other antisocial behaviours. They were asked to rate eleven different behaviours, not all related to driving, for their impact on the Victorian community in terms of the overall cost, including the number of people who are affected, the cost of rehabilitation and the cost of lost productivity while those people affected are unable to work or do other things in society. Figure 7 outlines each of the behaviours in descending order of perceived impact to the community.

Again, drink driving is considered to have the greatest impact on the community, closely followed by drug driving. The costs of drink and drug driving are put ahead of speeding, particularly low level speeding.



Q21. What impact do you think the following have in total on the Victorian Community? (n=1000)  
Using a 10 point scale where 0 means no impact and 10 means an extreme impact, how would you rate for the impact it makes on the Victorian community...

Figure 7: Perceived costs of behaviours on the community

## **Implications of the ‘Safe System’ Approach**

Victoria has adopted a ‘Safe System’ approach to road safety. This approach recognises that, even with the best preventive programs in place, road crashes will still occur – and aims to build a road system that offers maximum protection to all users by providing safer road infrastructure, increasing the proportion of safe vehicles on our roads and improving the safe behaviour of road users.

### **The principles and the relationship to speed**

The implications of a ‘Safe System’ approach on speed environments are significant. Table 2 demonstrates the limiting ‘Safe System’ impact speeds for various crash types in the absence of physical control measures such as safety barriers.

To prevent road death and disabling injury, while maintaining the speeds which are in line with the mobility function of a transport network, it is clear that a traffic system better adapted to the physical vulnerabilities of its users needs to be created. The challenge is that most of Victoria’s (and Australia’s) roads have been incrementally developed over the years and do not always provide for safe mobility at modern traffic speeds.

To illustrate the implications of Table 2, it is useful to consider Victoria’s rural arterial highway network (M, A, B and C roads). Excluding townships, this network is approximately 20,360 kilometres in length. The main crash risks on these roads include head-on crashes with oncoming traffic, run-off-road crashes and crashes with other vehicles at intersections. If these roads had best practice intersection design and roadsides clear of unprotected hazards (which is, in reality, not the case for the vast majority of these), approximately 85 per cent of

the network would still fail the impact speed test for head-on crashes (Table 2, bottom row). This is due to the fact that they are undivided roads with a speed limit greater or equal to 70km/h and have no protection from head-on crashes.

*Table 2: ‘Safe Systems’ speed environments: impact speeds above these speeds have a high probability of serious injury or death.*

Impact speed	Road User Type	Crash type
30km/h+	Vehicle occupant	Side impact crash with fixed roadside objects such as poles and trees
40km/h+	Pedestrian, cyclist, motorcyclist	Impact with other vehicles
50km/h+	Vehicle occupant	Side impact crash with another vehicle
70km/h+	Vehicle occupant	Head-on crash with a similar vehicle

Victoria’s roads were not built to be unsafe but have experienced an increase in risk as traffic volumes, vehicle mix and travel speeds have changed due to increases in motorisation, economic development and the associated demand for mobility. As the safety benefits of modern infrastructure have become apparent over recent decades, governments should have invested to improve safety (e.g. installation of median barriers to prevent head-on crashes), but they have not. The funding implications of upgrading and maintaining Victoria’s \$21 billion road network asset are now a significant challenge. In some quarters, this has led to suggestions to reduce speed limits and mobility as an interim (or even substitute) countermeasure to improved infrastructure.

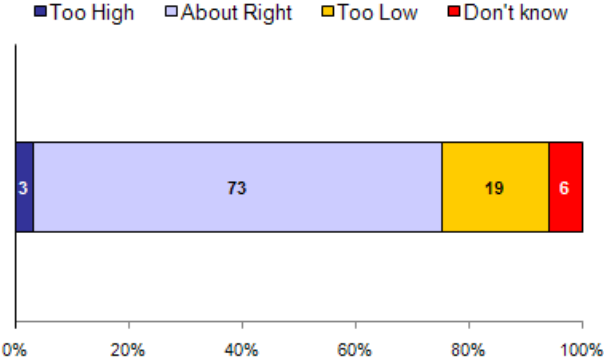
As the discussion on infrastructure improvements and speed limits has matured, it has become apparent that neither of the ‘fund all improvements’ or ‘lower all speed limits’ extremes are acceptable or practical. This has led to the ‘fit for purpose’ approach which recognises that speed limit reduction strategies alone will only lead to small reductions in actual travel speeds and thus are limited in their impact on crashes by the scale and scope of application. This ‘fit for purpose’ approach advocates that where mobility is important, governments should invest in improving the inherent safety of the road infrastructure to ensure safe travel at high speeds is maintained. For those low volume sections of the network where it is not important to maintain higher speeds, it would be appropriate to review both low-cost infrastructure improvements and speed limits. This principle already applies on local urban roads, where a lower default speed of 50km/hr applies and targeted speed limits of 40km/hr are in place on streets with schools or ribbon shopping precincts (where access to landuse is the most critical factor), while arterial roads and freeways have higher speeds due to their function of providing mobility.

**The ‘Safe System’ concept in practice: community responses**

**Speed limits and the ‘Safe System’**

To define a context for discussion about ‘Safe System’ speed limits, motorists were asked whether they believe that speed limits are currently set at an appropriate level. As shown in Figure 8, the majority (73 per cent) believe the current limits are set appropriately. Deeper analysis shows this is true especially for women (77 per cent), part time workers (78 per cent), people living outside Melbourne (77 per cent) and people who drive up to 10,000 kilometres

per annum (80 per cent). Nearly one in five (19 per cent) believes current limits are too low; a belief held most strongly amongst men (25 per cent), people living in the city (20 per cent), people working full time (24 per cent) and higher distance drivers (27 per cent of people driving 25-50,000 kilometres per annum). The balance (six per cent) did not answer and these respondents were found across the board.



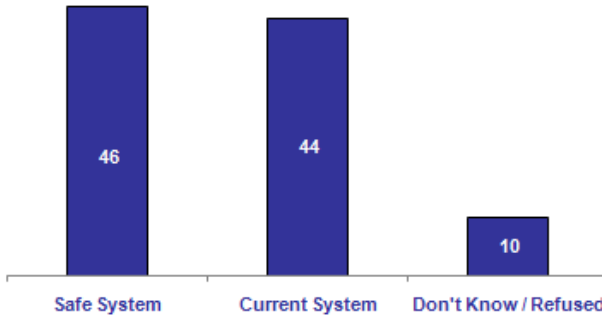
Q14. In general, do you think the speed limits on Victoria's roads are...? (n=1000)

Figure 8: Support for current speed limits

Motorists were then asked to consider the ‘Safe System’ for setting speed limits and were read the following definition:

*In Sweden and the Netherlands they have decided to set speed limits at a low level so that it is very unlikely that anyone would be killed in a crash. In Australia the approach to setting speed limits involves a balance between safety and getting people to their destination as quickly as possible, which means that people can drive faster, but at the cost of some road deaths and serious injuries. In principle, which of the two systems do you think is the best way to set speed limits?*

The two systems were read to respondents in randomised order so that each was presented first in half of the cases. Figure 9 shows that motorists are evenly divided as the merits of the two approaches and the balance (10 per cent) was unable to make a decision.



Q15. In principle, which is the best way to set speed limits...? (n=1000)

Figure 9: Support for the ‘Safe System’ concept

Women were the population group standing out as being more highly in favour of the ‘Safe System’ approach (55 per cent agreement). Those who refused to answer (one per cent) or said ‘don’t know’ (nine per cent) were motorists of all types. Also motorists who claim

never to exceed either the 60km/h or 100km/h speed limits by 5km/h are most highly in favour of the 'Safe System' idea. Motorists who drive low kilometres (52 per cent who drive less than 10,000 kilometres per annum) and people living in households with incomes less than \$40,000 (50 per cent) were also slightly more likely than others to favour this method of setting speed limits.

The current system found higher support from men (54 per cent) and amongst full time workers (50 per cent), people holding heavy vehicle licenses (58 per cent) and driving more than 25,000 kilometres per annum (55 per cent of people driving 25-50,000 kilometres and 66 per cent of people driving further).

Motorists living outside Melbourne were more likely than others not to answer this question, but those who did answer were more strongly in favour of the current system (48 per cent) than the Safe System (39 per cent).

Respondents were then given the following further details about the Safe System and asked to comment:

*The system in Sweden and the Netherlands means that the speed limit on residential streets is 30 km/h, on other urban streets it is 50 km/h and on country roads it varies from 70 km/h to 110 km/h depending on the level of safety of the road. These are the speed limits at which it is very unlikely that anyone would be killed in a crash on that particular road type.*

Four in ten (42 per cent) respondents offered positive comments about the system with one third of motorists (33 per cent) of all types saying the system might be worth trying. Two thirds of motorists (66 per cent), however, offered negative comments. Foremost amongst these was the belief that this system would mean that travel times would be too great (29 per cent), a view held consistently by motorists of all types. The residential speed limit of 30km/h was resisted by one in seven (17 per cent), particularly people driving on learners permits or on probationary licenses (28 per cent). Just over one in six respondents (15 per cent) gave no specific reason for their opposition, they stated that they simply didn't agree with the idea. Men were more likely than women to say this (19 per cent).

### **Reducing speed limits**

At the beginning of the survey respondents were asked their support for speed limits at different levels in situations encompassing residential streets, urban arterial roads, rural arterial roads and unsealed rural roads. The questions were posed again with respondents having further knowledge about the 'Safe System' and that the likelihood of anyone being killed on these roads would be reduced if lower speed limits were introduced and adhered to.

The majority of Victorian motorists believe current speed limits are set appropriately. While most have also accepted the introduction of 50km/h limits on residential streets, the concept of reducing this further to 40km/h is resisted and if introduced it is unlikely to be met with widespread support (or compliance). There would be some support for the introduction of this limit to areas of heavy pedestrian activity. There is reserved support for a reduction in the speed limit for metropolitan arterial roads and a reduction in the speed limit on undivided country roads from 100km/h to 80km/h (albeit less for the latter). There is, however, stronger support for reducing the speed limit on unsealed roads to 80km/h.

There was a change in support for speed limits at different levels following the introduction of the 'Safe System' concept, which demonstrates that some motorists, particularly some women, lower income earners and part-time workers could be motivated to change their behaviour in the knowledge that lives may be saved on Victoria's roads. Most motorists, however, seem to accept the trade off between increased mobility and the reality of some fatalities on the road.

## **Discussion and conclusions**

Speed management is a complex area of policy. The setting and enforcement of speed limits compatible with the road use at a location is an essential component of a safe road system and is strongly influenced by road infrastructure and land-use factors, tempered by community expectations of a system which provides efficient transport. Recognising that this was going to increasingly be a significant issue for Members over coming years, the Australian Automobile Association developed a Position Paper on Speed Limits, to provide a national policy context for Clubs in this debate.

This policy strongly advocates that infrastructure improvement programs are the first/best approach to providing the community with safe mobility, through improvement wherever possible of the inherent safety of road infrastructure. It argues that improvements to infrastructure must form the starting point of any discussion about Safe System speed, but also recognises that the discussion about 'fit for purpose' roads, some with possibly lower speed limits is required.

The latter point has now become a policy reality. The National Road Safety Strategy (NRSS) has a significant focus on 'safe speeds', reflecting and reinforcing the nationally adopted Safe System philosophy. The Strategy recognises the importance of investing in improved infrastructure safety on roads where mobility is important, albeit without any clear future commitment to increase funding. It also provides a specific commitment to have an ongoing dialogue with Motoring Clubs about speed limits.

The key findings of RACV's market research support the need for an informed and open discussion about speed management, and for governments to better communicate the reasons behind and need for appropriate speed limits and the 'Safe System'. AAA and its constituent State and Territory Clubs are will play a leading role by engaging our members in this discussion. We do, however, consider that more effort is required by governments to communicate the rationale behind, and benefits of, appropriate speed limits and appropriate travel speeds to the community.

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