
Contributed Articles

Road Safety Policy & Practice

Understanding low-level speeders to increase speed compliance via road safety campaigns

Richard Blackwell¹, Sarah Zanker², Joanne Davidson³

¹*Motor Accident Commission, Adelaide, Australia*

²*Colmar Brunton, Adelaide, Australia*

³*Formerly Colmar Brunton, Adelaide, Australia*

Corresponding Author: Richard Blackwell, GPO Box 2438, Adelaide, SA 5001, richard.blackwell@sa.gov.au, 08 8422 8106

Key Findings

- Greatest reductions in road trauma can be yielded by targeting the greater volumes of low-level speeders.
- Low-level speeders are disengaged from the notion that their behaviour can have consequences.
- Research has quantified and measured four distinct groups of low-level speeders, characterised by shared perceptions of ‘speeding’.
- Tactical messaging has addressed specific resistances and resulted in greater speed compliance over time.

Abstract

Reductions in speed and speeding will have an immediate impact on reductions in road trauma, yet persuading road users to adhere to speed limits remains a persistent communications challenge. Why is it that the risks of speed and adherence to speed limits remain a contentious issue amongst otherwise law-abiding road users? This paper explores some of the attitudinal and research insights that have been mined from extensive interviews with low-level speeders, the resulting campaign messaging and effects over the longer term.

Keywords

Speed; speeding; road safety advertising; campaigns; campaign effects; attitudes; behaviours

Introduction

The Motor Accident Commission (MAC) is responsible for road safety education campaigns and communication activities in South Australia on behalf of the Government of South Australia. MAC have engaged in investigative behavioural and attitudinal research amongst drivers across a variety of audiences, developing a body of knowledge of driver behaviour and attitudes since 2007. This includes the issue of speed and speeding.

Encouraging drivers to drive within speed limits is a key activity in MAC’s behavioural change program in recognition that reductions in speed and speeding is one of the cornerstones of the Safe Systems approach to reducing fatalities and serious injuries on our roads as documented in *Towards Zero Together: South Australia’s Road Safety Strategy* (Government of South Australia, 2011). At the same time voluntary compliance with speed limits, or

travelling within speed limits, is one of the most challenging behavioural issues facing road safety with considerable sections of the public viewing small increases over the speed limit as inconsequential and speed limits as arbitrary, inhibiting mobility and a source of opportunistic revenue raising.

In order to better understand the motivations for and attitudes toward low-level speeding MAC undertook investigative research to understand the psychology of low-level speeding to determine how best to craft tactical messages that may challenge those perceptions. Research was undertaken with Colmar Brunton Adelaide. Colmar Brunton are a market research agency specialising in both qualitative and quantitative research across a broad range of social issues and public education campaigns for Government and Not For Profit organisations.

Why low-level speeding?

Analysis by the Centre of Automotive Safety Research (CASR) of where injury and fatal crashes occur indicates that while speed reductions of any type would be expected to reduce injuries and fatalities, the greatest potential gains for reducing injuries appears to be in targeting low-level speeding, between 0-10km/h over the legally signed speed limit, on Adelaide low speed (50km and 60km) roads. For fatalities this would be extended to include low-level speeding on high speed rural roads (Doecke, Kloeden and McLean, 2011).

For this reason, MAC's speed related programs target those drivers that 'low-level speed'. At very high speeds the risk of crash becomes severe and when a crash occurs the results are dramatic. These types of crashes generally garner the most media attention and are of the style that is generally referenced when community speaks to speed, speeding and speeders. However, the sheer number of low-level speeders contribute to a large proportion of the risk associated with speeding. (Gavin, A., Walker, E., Murdoch, C., Graham, A., Fernandes, R., and Job, R.F.S, 2010)

Attitudes to Speeds

Numerous research projects undertaken by Colmar Brunton over seven years have unearthed many attitudes and behaviours toward speeding. There are many stated rationalisations for when people speed, such as running late or keeping up with the flow of traffic, however whatever 'excuse' is given there appears to be consistent themes.

Commonality of speeding

Speeding is considered to be extremely common among both regional and metropolitan speeders. Respondents do appear to feel overall that traffic was slowing down but some attribute this to speed limit reductions and roadworks, rather than greater compliance. Regional respondents indicate they are trying to slow down more and speed less. Some (especially regional females) indicated that they are now more aware of their speed than they had been previously. Metropolitan respondents indicate some effort at reducing speeding, largely motivated by the size of fines and the perceived increase of enforcement from cameras and police.

Ease of speeding

Among regional males, the design of modern cars was cited as encouraging speeding. Among regional females overtaking was the key thing that justified speeding. For the metropolitan participants, other drivers speeding and being familiar with the route (and the locations of fixed cameras) made it easier for people to drive over the speed limit.

Perceived consequences of speeding

While those who do not speed think speeding is not acceptable and feel like they are in the minority, those who speed think driving under the speed limit is unacceptable and dangerous. Most speeders feel that low-level speeding is

something very different from excessive speeding and that the "problem" is not low-level speeding but all excessive behaviours, including drink and drug driving. Low-level speeding is not seen as a big issue and acceptable to most speeders. Regional respondents considered negative consequences of low-level speeding to be "unlikely" other than enforcement which was considered relatively easy to avoid. Most metropolitan participants also felt negative consequences of low-level speeding were unlikely, however was of greater concern than amongst regional drivers. The concern however, was more related to 'other drivers' rather than potential risks they were creating themselves.

There is a group of persistent speeders, most likely to be metro males, who feel there is nothing wrong with the behaviour. In summary, persistent speeders expressed the following attitudes:

- Negative consequences are not applicable to them.
- Other drivers are to blame for dangerous situations and crashes.
- Extensive arsenal of excuses, with some irrational or contradictory (e.g. running late but at the same time acknowledging lack of time saved by speeding, keeping up with the flow of traffic, above average driving skill mitigating risks, its dangerous to drive under the legally signed speed limit.)

When they would not speed

Driving over the speed limit is accepted in 50, 60, 80,100 zones. Respondents said they would not speed in 40 zones and especially not when there are people around. This suggests when people can see a justification for the speed limit they will obey it.

Non-speeders and perceived consequences of non-speeding

Non-speeders feel pressured by speeding traffic. Non-speeders indicated that they intentionally slow down if someone behind is pressuring them to drive faster but get frustrated that that speeders appear to suffer no negative consequences. Non-speeders essentially receive constant negative reinforcement from obeying the law. This suggests there is opportunity to reinforce and reward non-speeders' positive behaviour.

"Hooning"

Most low-level speeders were disparaging of high level speeders (even if they used to be guilty of this themselves). There is an opportunity to leverage this attitude by persisting with encouraging people to think of any speed over the limit as speeding.

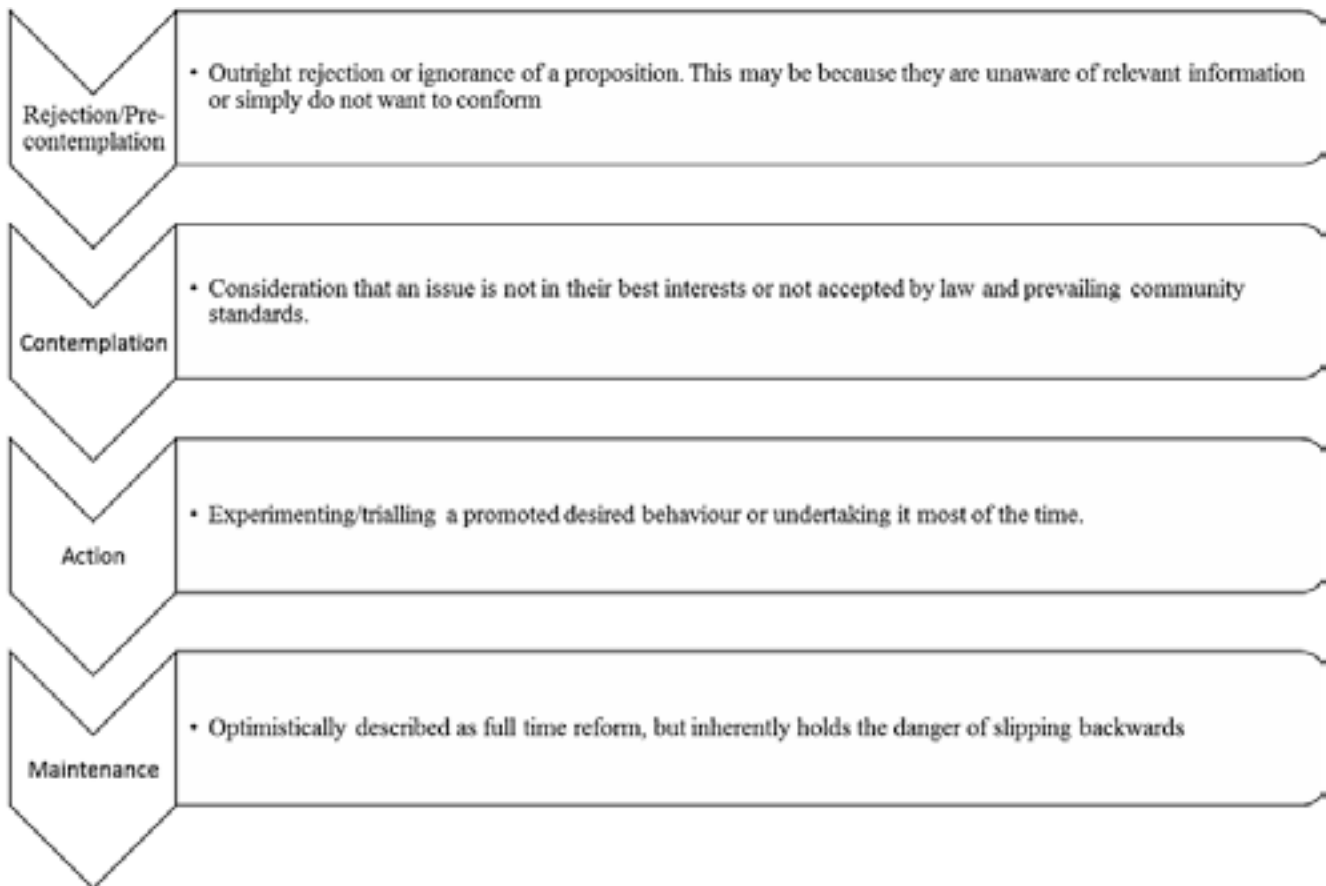


Figure 1. An adaption of the Prochaska and DiClemente behaviour change model – Stages of Behaviour Change

The Communications Challenge

'It's not an issue'

Those interviewed regarding their low-level speeding behaviour indicated that they disapproved of extreme behaviours such as 'hooning' and drink driving. Low-level speeding does not carry the same level of social stigma as other issues and is not seen as an overtly dangerous act likely to increase the immediate danger of a crash. It is also engaged in by a greater number of road users (as opposed to issues such as drink/drug driving) who would likely view themselves as law abiding citizens.

So why do they 'low-level speed'? A consistent theme to emerge from feedback to MAC speed campaigns, and focus groups conducted in their development, is a pronounced cynicism that low-level speeding has a meaningful contribution to road trauma.

Traditional depictions of road trauma in low-level speeding advertising are seen as exaggerated outcomes reinforced by drivers' own experiences in not having crashed over many years of regular speeding. The absence of any crash, let alone a serious crash, after an individual's many years of low-level speeding is often cited as absence of evidence that their speeding could be contributing to crash risk. It is this that sits at the heart of the problem of low-level speeding and

the challenge of expressing the problem to the public. Low-level speeding, unlike other road safety and social marketing issues, does not have an intuitive or obvious cause and effect relationship.

Broad Audience

Compounding the problem is the fact that the low-level speeding issue is relevant to such a broad section of the community. As such, there is greater diversity in the 'target audience' making messages that resonate with all of them more challenging than with some more tightly defined audiences.

Unengaging Subject Matter

A key problem identified in focus group testing is that the subject matter regarding speeding is not compelling to the target audience. While it is easier to find the drama in more obvious cause and effect relationships, such as drink driving or not wearing a seatbelt, the communication of the facts of low-level speeding are difficult to make interesting.

While often challenged, audiences can also be accepting of some data presented however its ability to engage and motivate is limited. For this reason, the delivery of messages in this issue needs to be engaging in order to cut through and hold attention.

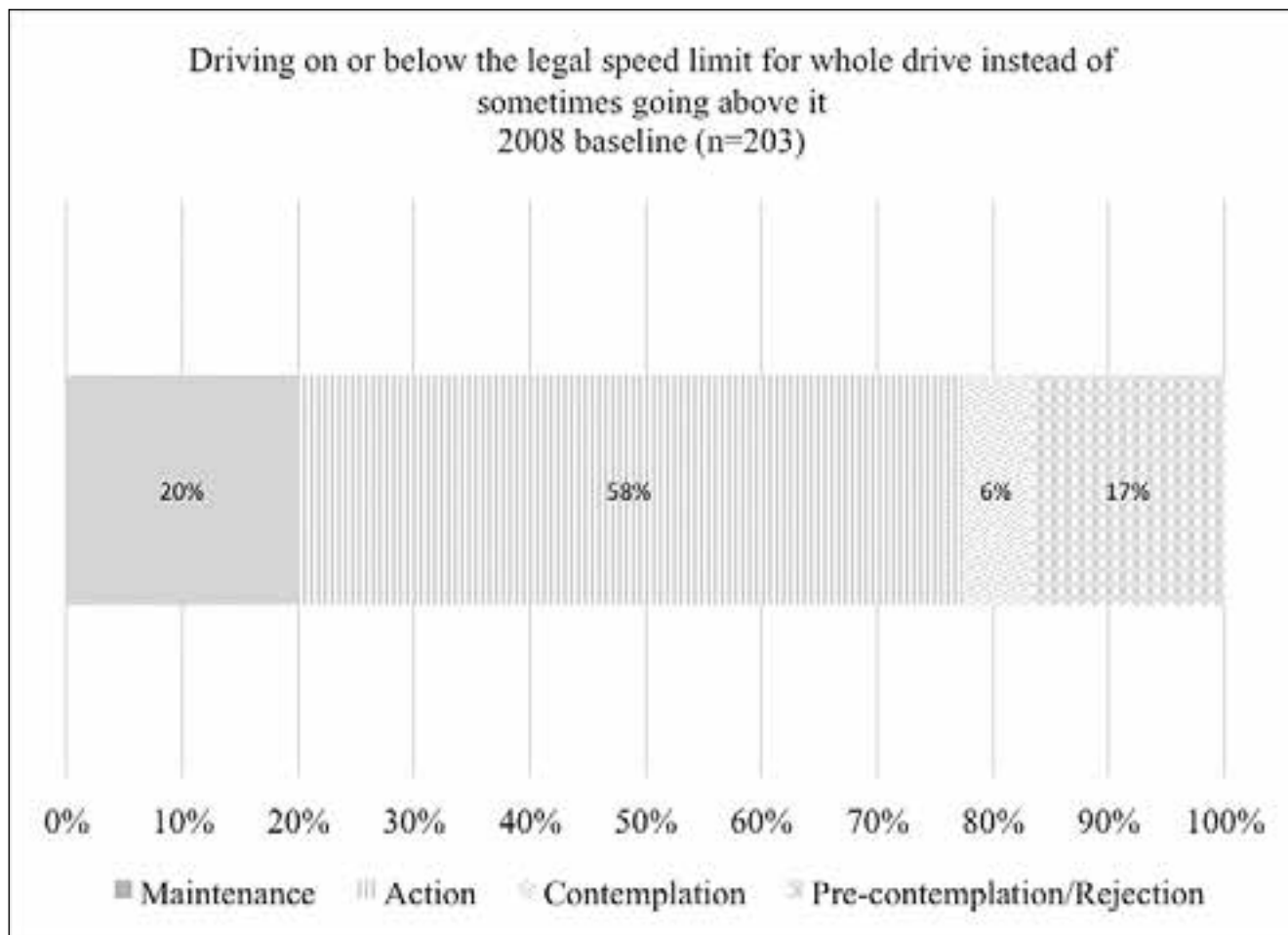


Figure 2. Stages of Speeding of South Australian Road Users, 2008

Behaviour Change

In applying road safety messaging to audiences MAC and Colmar Brunton use an adaption of the Prochaska and DiClemente behaviour change model (Figure 1), to analyse and quantify where audiences sit on the path toward desirable road user behaviour. In the case of adhering to or below the legally signed speed limit, in 2008 a quantitative survey of South Australian Road Users (Figure 2) showed that only a minority of drivers adhered to the speed limits all the time with similar proportions rejecting the notion of adhering to speed limits.

Re-positioning Low-level Speeding

In 2008, a survey of South Australian drivers, exploring attitudes toward the issue of speeding, identified a problem with the language road safety communicators were using around speed. The words ‘speed’, ‘speeding’ and ‘speeders’ were intrinsically linked to high level speeding. Most speeders felt that low-level speeding was something very different from excessive speeding (more than 10kms over the limit) and that the “problem” is not the low-level speeding but in fact the excessive behaviours (including excessive speeding, drink and drug driving). To ask someone not to ‘speed’ was to ask someone not to grossly exceed

the speed limit in an obvious display of dangerous driving. Therefore, campaigns targeting low-level speeders were deemed irrelevant to the specific behaviour of driving between 1-10km/h over the legally signed speed limit and went unnoticed.

“Creepers 2008-2012”

Based on the 2008 research, the term ‘creeping’ was coined to refer to the road safety issue of low-level speeding, distinguishing it from the extreme behaviour that disconnected low-level speeders from their negative actions. The “Creepers” campaign was developed to re-frame the low-level speeding argument so that it was relatable to the routine behaviour of daily low-level speeders. An education campaign was launched to impress upon ‘everyday drivers’ that ‘creeping’ had a cumulative impact that resulted in a high level of casualty crashes. “Creepers” ran from October 2008 to 2011 with two evolutions to ‘refresh’ the creative.

Key learnings:

The term “Creeper” evidently became part of the vernacular and imbued with meaning. It is clearly distinguishing for drivers between driving “just a little bit” over the speed limit as opposed to driving at excessive speeds. However, as the term “Creeper” became strongly associated with a particular

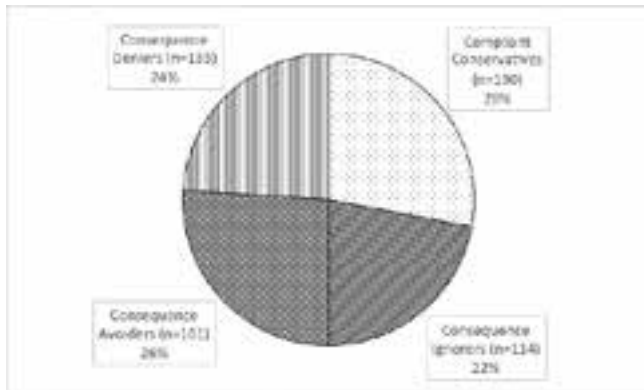


Figure 3. Segmentation of low-level speeders (n=600)

type of speeding, the visuals used in the Creepers ads now stand out strongly as not being related to “creeping” but rather to “high level speeding” and the ads consequently lost credibility.

While there was value in the continued use of the term “Creepers” to denote low-level speeders, campaign visuals and tactical messaging needed refreshing.

Characterising and Grouping Low-level Speeders

Having established low-level speeding as a relevant issue and relatable behaviour, in 2011/12, quantitative research was undertaken amongst South Australian low-level speeders to segment them on the basis of attitudes toward speeding and willingness to change, recognising that the motivators for all speeders would not necessarily be the same. The following segments were identified and were found to be fairly evenly distributed in the population, as illustrated in Figure 3 below.

Consequence Deniers (24%) – Do not believe speed is an issue. Hardest to shift.

This group tends to span the age and gender distribution of drivers with no skew towards a particular demographic, household type or level of education. 56% are male and 59% are aged over 40 years of age including 42% who are aged between 40 and 64 years. 80% of this group live in metropolitan Adelaide although 38% drive on regional roads at least weekly. They drive often with 99% driving at least 3 times per week and do not consider low-level speeding to be speeding. Speeding is defined as 10km/h + over the legally signed limit.

For this group there is little consequence to low-level speeding and it is likely that they believe an enforcement focus on low-level speeding is motivated by factors other than safety (such as revenue raising or political motivations). They deny that there are any meaningful consequences to low-level speeding. This can be seen in their relatively high levels of agreement that “driving up to 5kms over the limit is fine in 50 and 60 zones” and that “low-level speeding doesn’t cause accidents”. They show a lack of respect for

the law and perceive low risk of being caught speeding at low-levels. They are less likely than other groups to agree that “you should never drive 1 to 5 kms over the speed limit because it is the law” and “I risk getting caught and fined if I drive between 1 to 5 kms over the speed limit”.

Potential messages/approach

This group is the hardest to shift with communications in isolation and will most likely respond to interventions that significantly increase penalties and opportunity for detection.

Consequence Ignorers (21%) - Do not believe speed is an issue. May respond to new information or penalties, or changes in overall traffic speeds.

This group skews to young male drivers that drive frequently. 61% are males and 38% are aged between 16 and 35 years. 71% live in metropolitan Adelaide and 29% in regional South Australia. They have a high frequency of driving (92% everyday) and half drive at least weekly on regional roads. They acknowledge that they sometimes creep over the limit, particularly in response to the speed of the traffic flow. Despite their speeding behaviour, they do acknowledge the risk of low-level speeding. While they have a high incidence of being fined for speeding their focus tends to be on avoiding the potential consequences of low-level speeding while still indulging in the behaviour – they ignore the consequences.

Most try to not speed most of the time but 9% deliberately drive over the speed limit. If they realise they are creeping they are more likely than other groups to maintain the higher speed rather than slowing down - one third of this group would not slow down to the speed limit if they realised they were speeding. They have the highest incidence of having been fined for speeding (80%).

This group agrees that they risk being caught and fined at low speeding levels and agree that small reductions in speed can positively influence crash chances and outcomes. They also have a higher level of agreement, compared to Consequence Deniers that people should not drive over the speed limit simply because it is the law. They are also more likely to worry about a crash if low-level speeding in a 60 zone and less likely to agree that low-level speeding is fine in 50 and 60 zones. This group is also likely to go along with changes among most drivers.

Potential messages/approach

They tend to keep up with the flow of traffic and see speeding as “normal”, a shift in other people’s driving is likely to have a flow on effect to this group.

Consequence Avoiders (26%) - Acknowledge speed as a potential issue. Need encouragement.

These are drivers that try to not speed but find themselves doing so to keep up with traffic or without realising it. When they realise they are speeding they tend to slow down to the speed limit. They not only acknowledge that their driving choices contribute to overall levels of trauma but are also motivated by fear of being caught and punished. They avoid the consequences of speeding.

There is a skew towards females in this group (62%). A significantly high 16% are on a provisional licence, however, there is no general skew among this group towards younger drivers – the age profile is similar to the overall driving population with 62% aged over 40 years. 75% live in metropolitan Adelaide.

They are moderately frequent drivers with 77% driving every day; 40% drive less often than monthly on regional roads. 98% try to not drive over the legal speed limit. Only 2% indicated that they sometimes knowingly speed. This approach is reinforced by the 64% who would immediately slow down to the speed limit if they realised they were low-level speeding.

This group considers personal contribution to the road toll to be credible with the highest average agreement of all the segments that they are personally reducing the road toll by driving on the speed limit. They are motivated to try to stay on the speed limit because they might get caught or simply because it is the law. They are equally worried about having a crash (more so in a 110 zone than in a 60 zone) and getting caught and fined when speeding.

As they have a willingness to do the right thing, and an acceptance that there are consequences to the unsafe behaviour, the critical element might actually be around increasing encouragement to reduce overall speeding, such as deliberately slowing down when realising they are driving over the limit.

Potential messages/approach

These people need to be instructed to decide if they want to be part of the problem or part of the solution. Their willingness to accept the consequences of low-level speeding would make them amenable to messages about being part of the solution. Encouragement to slow down when one becomes aware they are speeding, or resisting the temptation to speed from surrounding traffic.

Compliant Conservatives (28%) - Need reinforcement of behaviour

This is the group of drivers that actively chooses to not speed at low-levels. These drivers acknowledge and actively avoid the risks of low-level speeding. While they agree that one should not drive over the speed limit because it is the law, they are more focussed on the potential consequences of low-level speeding.

This tends to be an older group with 24% aged 74 and older. There is a skew towards females in this group (58%). 71% of this group live in metropolitan Adelaide. They are less frequent drivers being more likely to drive 2-3 times a week rather than daily compared to other segments. A significant 17% of this group never drives on regional roads. These people never deliberately drive over the speed limit on either metropolitan or regional roads. They are significantly more likely to drive less often than monthly on regional roads (57%). Their incidence of having ever been fined for speeding is also relatively low at 49%.

This group is sensitive to the definition of speeding with a significantly high incidence of defining speeding as 1-2 kms over the speed limit. This definition applies in both metropolitan and regional speed zones. When this group realises they are driving above the legal speed limit they immediately slow down – and have a significantly high incidence of slowing down to below the legal speed limit (38% for metro roads; 46% for regional roads). They have a relatively lower level of agreement that they sometimes speed to keep up with the flow of traffic, or that speed limits are generally too slow. They are equally worried about having a crash (more so in a 110 zone than in a 60 zone) and getting fined when speeding.

Potential messages/approach

Positive reinforcement of doing the right thing and putting up with pressure from other drivers, would reinforce this group's decision to not speed.

Evolution of Speed Campaign Messaging

“Crash Puzzle 2012-2014”

The prevailing view that low-level speeding does not make any difference is likely because many people low-level speed very often and have never suffered a negative consequence. Because so many people think this way, we have very high volumes of cars exceeding the speed limits by a small amount. The aggregated impact of this in traffic is a higher number of avoidable crashes.

If everyone slowed down and stuck to the legally signed speed limit, the aggregated impact on traffic would be a reduction in crashes. Because the actual impact on an individual and their individual trips may be negligible, ‘Crash Puzzle’ approached the low-level speeding issue as a broader community issue as one might with a water-saving campaign or an environmental campaign. That is, the small contributions of many people will have a big impact on society.

Pre-campaign research identified that when the low-level speeding argument was framed in this fashion it resonated and had the potential to change behaviour. That is, it encouraged people to slow down and stick to the legal speed limit, not out of fear of having a crash or getting a speeding ticket, but out of a desire to play their small part in reducing road trauma on our roads.



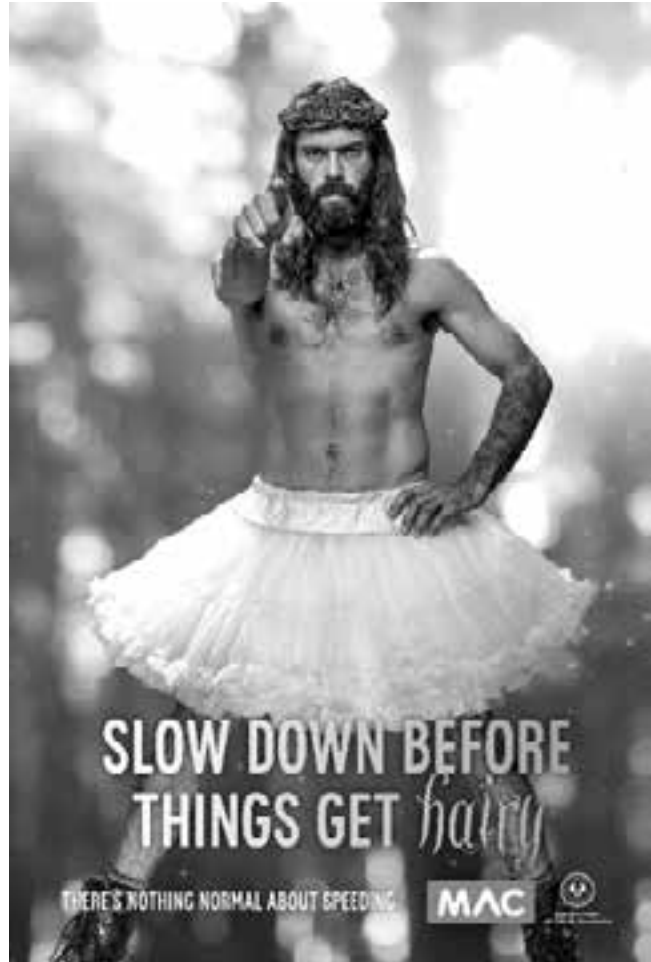
It is from this insight that campaign line and underlying strategic thought was drawn. The concept of Body Crash sought to demonstrate in an engaging way, that the low-level speeding issue is a community one, that when cars crash it is really people who crash, and that most importantly, we all play a part in the solution.

Key learning:

Awareness of this campaign was lower than previous campaigns suggesting the softer approach impacted cut-through. While the cumulative impact of volumes of low-level speeding traffic on the crash rate has merit, the challenges of articulating this concept to drivers is embodied in the abstract nature of this campaign compared with driver’s daily experiences.

“Mistakes 2014- 2016”

This campaign aimed to reframe the way that people look at their speed when they are driving. Rather than challenge the driver’s own behaviour it challenges the behaviour of ‘other people’. The speed a person chooses to travel at needs to leave room for any potential error, whether it is theirs or someone else’s. At speed, there is less opportunity for a driver to react to a mistake and recover. This campaign was developed by the New Zealand Transport Agency who kindly granted permission for its use in South Australia.



Key learning:

The impactful nature and talk ability of this TVC increased awareness of the speed issue considerably after launch. It has been broadly shared on social media and responded to positively.

Post campaign research also indicated that sections of the community viewed the creative as a cautionary message and promotion of safe driving generally.

“Hairy Fairy 2016-present”

This campaign aimed to normalise driving within speed limits by challenging some of the entrenched misconceptions around low-level speeding by;

- demonstrating that ‘most people don’t speed’
- educating the increased crash risk from small increments in speed
- encouraging compliant drivers not to succumb to speeding traffic
- encouraging speeders to correct their behaviour when they notice they are speeding

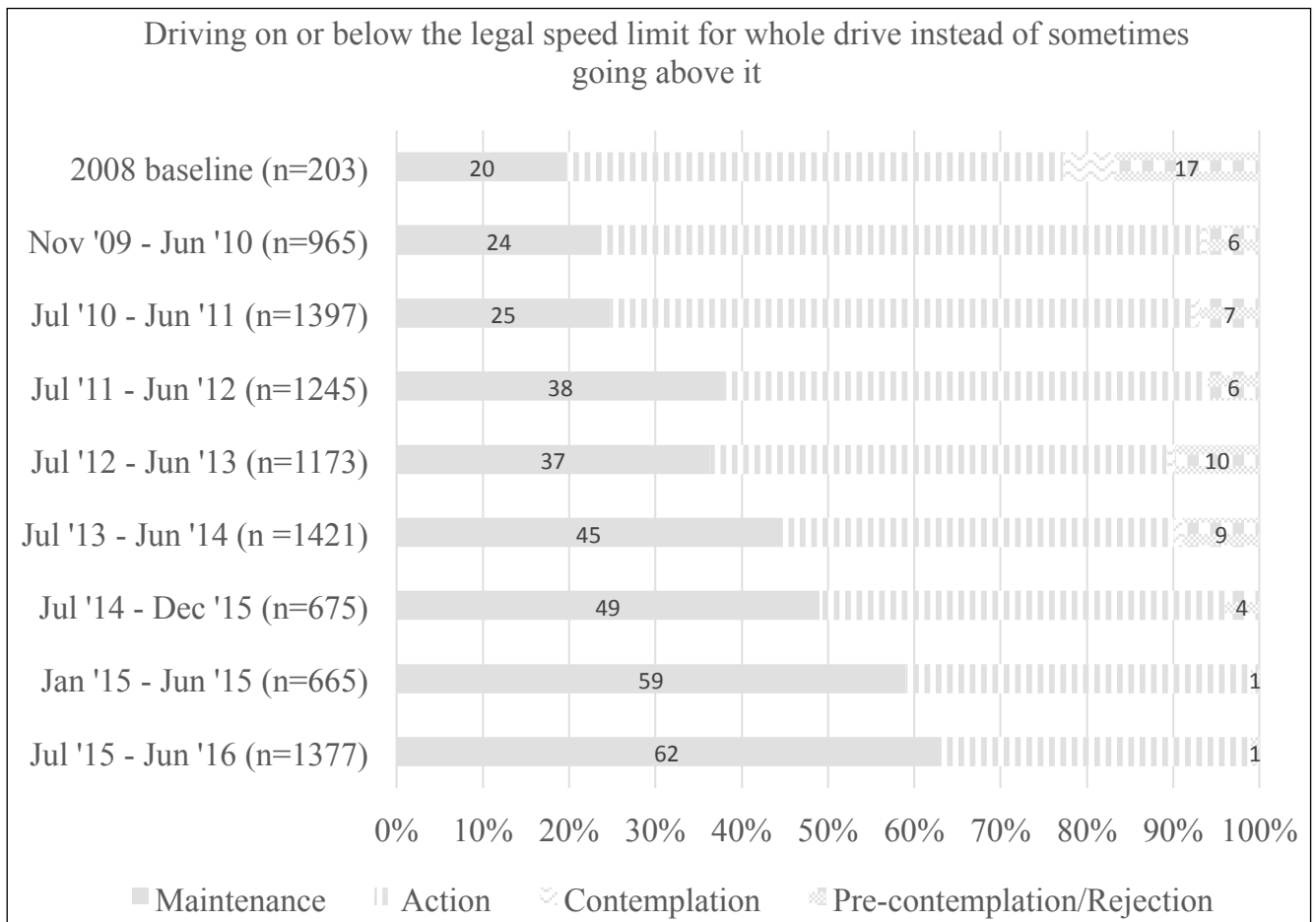


Figure 4. Stages of Speeding of South Australian Road Users, 2008 – June 2016

The presentation was in humorous style in order to cut through and engage audiences with a subject matter that carries the risk of being un-engaging. Launched in November 2016 and having had one month in market, sufficient data to assess campaign effectiveness is not yet available. However, initial feedback suggests cut-through, engagement and talk ability has been achieved.

Key Learnings and Campaign Effects

Reasonable expectations need to be set against what can be achieved through delivery of persuasive messages seeking attitudinal and behavioural change over time. The research has made clear that against the group of Consequence Deniers, the entrenched cynicism will make persuasive arguments difficult and interventions such as increased enforcement and penalties are heavier motivators.

Against other groups, a pre-disposition toward recognising the issues of low-level speeding give greater potential leverage, although best practice of delivery of these messages concurrent with enforcement activity is still relevant.

Campaign results are best tempered by isolating those variables that we can be confident our campaigns directly

influence and can be measured. In this instance the self-reported attitudes and behaviours have been measured via quantitative market research tracking.

Since 2008, the number of drivers who drive on or below the legal speed limit has grown significantly from 20% to 62% while at the same time, those who reject the notion have decreased significantly from 17% to 1% (see Figure 4 below).

Pleasingly, the behavioural results reflect the crash results, strengthening the argument that our combined efforts are pushing the regional road safety issue in the right direction. The implication of speed in South Australian road crashes in 2008 was 36%, decreasing to 30% in 2015.

Conclusions

Research on perceptions and motivations for speeding has highlighted the need and guided message development to reposition speeding as a relevant issue. The development of an attitudinal and behavioural segmentation of drivers in reference to speeding enabled the tailoring of messages to specific segments. Research has also identified perceptions that can be leveraged to improve desirable road behaviour as well as one segment that is unlikely to be influenced (i.e.

Consequence Deniers). These research findings guided communications, resulting in greater compliance with speed limit over time.

Tracking of campaign effects have shown that message effects of specific campaign executions appear to diminish quickly, necessitating continuous re-invigoration of messages and approaches to the problem. Memorable and impactful messages that provide cut-through are necessary to overcome perceived dryness and relevance of the issue. Tracking research also suggest that emotive messages, rather than rational, appear more salient.

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Road Safety Case Studies

Speed Limits: Getting the limit right – the first step in effective Speed Management

Michael de Roos¹ and Fabian Marsh²

¹Michael de Roos, mikes.fruit@gmail.com

²Fabian Marsh, fabian_marsh@hotmail.com

Corresponding Author: Michael de Roos, mikes.fruit@gmail.com

Key Findings

- This paper illustrates and challenges some of the orthodoxy surrounding the setting of speed limits using a case study:
 - Focus on the safe speed limit without compromising on the assumption it may be unacceptable to drivers.
 - The correct safe speed limit is essential to deliver further speed management initiatives.
 - The 85th percentile method for setting speed limits does not deliver a safe speed limit.
 - Proposes that there may be an ideal range when reducing a speed limit.

Abstract

The safety benefits of reducing speed limits and managing travelling speeds is well proven. However, practitioners involved in reviewing and setting speed limits continue to include practices that are based on assumptions. This paper uses a case study to apply established road safety models while challenging established practices that limit the potential for safety benefits. The next step is to better understand, through research, the range of effects on driver behaviour when speed limits are reduced and to develop physical devices suitable to safely moderate travelling speeds on higher-speed roads.