Non-peer review stream

Changing the conversation about speeding

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Abstract

Safe Speed is a key element of New Zealand’s safe system approach to road safety, in which no-one should be killed or seriously injured because they have made a mistake. It is important because excessive speed remains a contributing factor in 20% of fatal and serious injury crashes.

Enforcement, supported by advertising with a mixture of fact, emotion, and persuasion, has shifted behaviour over the years, with lower average speeds, fewer drivers exceeding the speed limits, and as a consequence fewer speed-related fatal and serious injuries. However, each year these shifts become more difficult to achieve.

New conversations in a safe system environment need to address concepts such as human vulnerability, social responsibility and the inevitability of mistakes. This paper discusses three pieces of communication within the New Zealand speed campaign which highlight these concepts, and in particular the rationale behind and the reaction to the new “Mistakes” advertisement.

The campaign acknowledges the audience’s belief that they are actually quite good drivers, but that mistakes, even when not their own, can have disastrous consequences. Audience reaction so far has shown a high degree of public interest in this approach to the speed conversation. From surveys of drivers’ attitudes, their responses to tests of advertising ideas during development and to the messages on-air, the approach has revealed widespread support for lower speeds and greater responsibility.

The results will include public reactions and attitude shifts, social media conversations, and any changes in vehicle speeds and crash rates.

Introduction

Safe Speed is a high priority for road safety in New Zealand [Ministry of Transport, 2010], where it is one of the four pillars of the safe system, one of the five top priorities for the national Transport Agency, and one of the five high priority objectives for the Road Policing programme.

Excessive speed is a serious issue, and remains a contributing factor in 20% of fatal and serious injury crashes. In 2013, 83 people were killed in New Zealand and 408 were seriously injured in speed-related crashes [NZ Transport Agency, 2014a].

As a driver behaviour however, speed is one of the more intractable problems for enforcement and advertising campaigns. Attempts to persuade people to reduce their speed invariably run into a storm of opposition. The reasons are varied: it may be that drivers feel challenged about their ability to control their own vehicles, or that there is an aspect of addictive behaviour which has to be addressed, or that speeding is seen as the one remaining pleasure from driving. The debate can be distracted by semantic arguments over “excessive speed (for the conditions)” versus “speed above the posted limit”, and sometimes it is difficult to obtain clear support for the message from influencers, stakeholders and authorities in the community.

Over the years, advertising campaigns to discourage speeding have employed most of the traditional approaches. The dangers of driving too fast have been well demonstrated, whether they are...
increasing a person’s chances of crashing and killing themselves or their passengers, killing other people, upsetting families and friends, hurting children, receiving a ticket or losing a licence, or trying to beat the laws of physics.

These campaigns have had an effect in New Zealand. With Police enforcing the speed limits, and with the advertising supporting their efforts with a mixture of fact, emotion, and persuasion, average speeds have come down, and the numbers of drivers exceeding the speed limits have fallen substantially. It is however more difficult each year to achieve the same results, and the overall speed in urban areas remains well above the posted limit.

**Behaviours and attitudes**

Speeds, as the primary indicator of behaviour, shifted a little on the open road during the past five years [Ministry of Transport, 2014], and in 2012 and 2013 actually reduced by 1 km/h from the 2008–2011 levels [Figure 1]. Crash numbers are also dropping, with speed-related fatal and serious injuries now below 500 per year.

![Speed surveys](Image)

*Figure 1. Annual surveys of vehicle speeds: percentages of cars exceeding the urban (50 km/h) and open road (100 km/h) speed limits, 2005–2013*

Attitudes to speed have been slower to shift over the same period, with marginal gains obtained each year. Summarising the opinions expressed in surveys of public attitudes to road safety [Ministry of Transport, 2013] and surveys of people’s reactions to road safety advertising campaigns [Glasshouse Consulting, 2014], these fall mainly into two areas, enforcement considerations and the personal driving experience. Typically,

- people agree that enforcing the speed limit, or using speed cameras, helps lower the road toll, and, that speed cameras are operated fairly
- people believe the penalties for speeding are not very severe
- posted speed limits are considered about right but the “limit” is the point at which speeds are enforced
- speeding drivers are better than the average driver, and there is not much chance of a crash when speeding if you are careful

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people like driving fast, and speeding is not that wrong.

A real change in these slowly changing points of view required a different approach to the conversation with the public about speed. Taking a cue from the safe system view of road safety, some elements of this new conversation needed to be:

- increasing understanding what travelling at safer speeds means
- seeing other road users as people who have a right to be there, not cars or objects
- relating speed to the likely severity of injury in the event of something going wrong
- recognising that people make mistakes, and the higher the speed, the less time there is to react.

Public reactions to advertising

The performance of the NZ Transport Agency’s advertising campaigns is monitored by a continuous online survey, conducted throughout the year and averaging 55 participants per week [Glasshouse Consulting, 2014]. The survey sample is structured to provide sufficient numbers of males, young, people, rural people and Maori for these groups to be analysed separately. Males and young people are therefore over-sampled to enable these analyses. The survey data include weightings to standardise the sample to a normal demographic distribution, to permit analyses of the whole sample [Table 1].

<table>
<thead>
<tr>
<th>Table 1. Advertising survey sample structure (3 months, N=720)</th>
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<td>sample structure</td>
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<tr>
<td>Males</td>
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<td>Females</td>
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<td>16-24 year olds</td>
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<td>Rural/provincial</td>
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<td>Maori</td>
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Survey questions of interest to this paper include:

- recall, relevance, likeability and message takeout
- attitudes to driving and road safety issues
- demographic information.

With increasing use on online and social media for promoting road safety messages, there has also been an increase in monitoring the uptake of these messages with metrics such as impressions (exposure, effectively opportunities to view), click-throughs (a viewer response, and sometimes the desired outcome of the advertising), views (a richer interaction by and with the audience) and time spent viewing. It has also been possible to follow and analyse conversation threads on sites such as YouTube, Facebook, Reddit, Twitter, etc. in order to assess audience reactions, and consequently to react almost in real time to audience feedback.
**Speed in a safe system**

New Zealand has adopted a safe system approach in its road safety strategy, which focuses attention on programmes, measures and interventions designed to reduce fatal and serious injuries. In a safe system, people would travel at the right speeds for the conditions, but should not be killed or seriously injured when they make a mistake. Three key principles of a safe system apply well to the problem of speed:

- an acknowledgement that people are vulnerable
- an acceptance that people will make mistakes
- a belief that safety on the road is a shared responsibility.

A further consideration is that no part of the system works in isolation, and that safety gains will be made when the problem of speed is addressed through a combination of road design, appropriate and acceptable speed limits, intelligent vehicle features, and drivers’ own attitudes and behaviours. Enforcement and education both play a part in the latter, and can influence and inform the design aspects of speed management. The combination should build a social climate that supports a better public understanding of risk, and future approaches to managing speeds.

**Enforcement**

The role of enforcement in a safe system is to remind the motorist of the appropriate speed, to encourage compliance, and take action when people go beyond the limits of correct behaviour.

The advertising campaigns continue to support the role of enforcement to change driver behaviour by encouraging compliance. Intensive speed enforcement makes significant demands on Police resources but does have an effect, as evidenced by New Zealand’s recent Safer Summer programme in which enforcement thresholds were reduced over two months of the summer of 2013/14 [NZ Police, 2014]. Average speeds reduced during this period, but returned to normal in the following months.

The longer term intervention is to change the way people think and talk about speed.

**Advertising**

These safe system principles have been applied to three new advertising campaigns which have been developed in recent years. The television commercials associated with each of the principles have been respectively titled “Flying Objects” (human vulnerability), “Drive Social” (shared responsibility), and “Mistakes” (people make mistakes).

**Vulnerability**

To address human vulnerability in a speed-related crash situation, an advertising campaign was developed around a high definition, slow motion representation of two vehicle occupants in a crash at speed. Despite the energy-absorbing features of the vehicle, and the deployment of seatbelts and airbags for the occupants, the collision of organs with hard structures within the body (the third impact) was still sufficient to cause death or serious injuries. The campaign was launched in March 2011, using a combination of television, radio, outdoor advertising and direct mail. The advertising

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1 Serious injuries in New Zealand crash reports are defined as fractures, concussion, internal injuries, crushings, severe cuts and lacerations, severe general shock necessitating medical treatment, and any other injury involving removal to and detention in hospital.
message encouraged the audience to consider aspects of a crash that they may not have considered before: that even with the best protection, you are still vulnerable.

With this advertising approach, people were faced with truly understanding the vulnerability of their own body in a crash, that there are limits to what a body can sustain from crash forces before it is seriously injured or damaged. It acknowledged that vehicles are much safer than they used to be, and that roads are also continually upgraded and changed to make them safer for drivers. However while improvements continue to be made in these areas, the human body will never be upgraded.

Further details of the advertising campaign can be found on the Flying Objects website [NZ Transport Agency, 2013a].

Initial results from this advertising campaign have been presented in an earlier paper [Graham, 2013]. The advertising has continued to perform well with its target audience, with good levels of awareness, relevance and likeability over an extended period of time [Figure 2].

"Flying Objects": recall and relevance

![Graph: "Flying Objects": recall and relevance](image)

**Figure 2. Percentages of surveyed audience who recalled the TV advertisement “Flying Objects”, liked the advertising, and found the advertising relevant to people like themselves**

Around 80% of the surveyed audience are aware of the campaign when prompted, and its relevance to them has stayed at around 50% more than two years after the launch of the campaign. Likeability has remained at around 30% during the lifetime of the TV advertisement [Figure 4], somewhat lower than average but reflecting the unpleasant content and imagery. Over the years, New Zealand’s speed advertising has tended to deliver a principal, default message of “slow down”, and this advertising is no exception. This particular campaign also delivers useful secondary messages relating to human vulnerability, the most significant of which are “you can still be injured even if using seatbelts or in a safe modern vehicle”, and “the impact of speed can cause major injury”.

In addition there has been a longer term shift in one of the key attitudinal indicator questions relating injury severity to speed. The percentage of survey respondents who agree that serious injury is a likely consequence of crashes over the speed limit has increased from around 60% prior to the campaign to a stable level of around 80% post-campaign. Similarly the percentage who disagrees has decreased from around 20% to around 5% [Figure 3].
Shared responsibility

The concept that all road users share the responsibility for their safety and that of others was used in a short series of advertisements with the theme of Drive Social. This campaign aimed for the road to be seen more as a social space, where all road users interact with each other to achieve their varied goals. As the campaign developed it soon evolved into an approach which addressed all driver and road user behaviours, rather than simply drivers’ speeds.

A first advertisement launched in February 2013 encouraged the audience to realise that other road users sharing the roads with them are likely to be from the same areas and with similar destinations, in other words fellow human beings whom they possibly know. The campaign was developed both as television, radio and outdoor advertising, and also as an interactive Facebook site, accessible from computers, tablets and smart phones. This enabled people firstly to discover others like themselves on the road at the same times and using the same routes. They were also able to comment using Facebook and Twitter on their experience and on the campaign in general, providing timely feedback on their opinions, likes and dislikes about driving. Promoted tweets were used to further encourage and continue the conversations.

As well as monitoring media effectiveness of the campaign through website activity (impressions, click-throughs and tweets), the number of conversations and the content of those conversations were also measured. After six months, the conversation topics had settled to a pattern of relating the Drive Social brand to driver behaviours which had been witnessed and deemed inappropriate by the tweeter. These were generally “anti-social” behaviours such as tailgating, ignoring school zone speed limits, or failing to wear seatbelts.

This Drive Social message was readily accepted, and a second advertisement was developed to extend the idea of the social nature of driving. In a social environment, one person’s actions will have an effect on others in that same environment, and this insight formed the basis of an animated video on television and YouTube.

Further details of the advertising campaign can be found on the [Drive Social website](http://drivesocial.co.nz) [NZ Transport Agency, 2013b].
Mistakes

The safe system principle that no-one should be killed or seriously injured because they have made a mistake on the roads was the driving force behind the next stage of the speed advertising campaign.

Surveys [Glasshouse Consulting, 2014] had shown that audiences had already bought into the idea that driving fast increases both the likelihood of a crash, and the severity of that crash. They also accepted that driving over the speed limit also increases the likelihood of a speeding ticket, and most people (76% in 2013) [Ministry of Transport, 2013] agreed that enforcing the speed limit helps lower the road toll. However, persistently, the target audience of drivers who like to speed believes there is not much chance of a crash when speeding if you are careful, and that speeding drivers are better than the average driver.

To shift their thinking, the new campaign would accept the audience’s belief that they are actually quite good drivers, but persuade them to acknowledge that mistakes can have disastrous consequences, even when not their own mistake. Any new approach would have to use the reality that speed reduces the time available to recover from a mistake, either that of the driver or that of someone else. This audience is typically rational, so the approach needed to have a factual basis, for example that as speed increases, there is also an increase in stopping distance, or the chance of exceeding the critical speed on a curve, or of other road users misjudging how fast the speeding driver is travelling, or a rear-end crash if the driver has not increased his following distance.

To launch the new campaign, the approach would accept the audience’s belief that they are actually quite good drivers, but persuade them to acknowledge that mistakes can have disastrous consequences, even when not their own mistake. Any new approach would have to use the reality that speed reduces the time available to recover from a mistake, either that of the driver or that of someone else. This audience is typically rational, so the approach needed to have a factual basis, for example that as speed increases, there is also an increase in stopping distance, or the chance of exceeding the critical speed on a curve, or of other road users misjudging how fast the speeding driver is travelling, or a rear-end crash if the driver has not increased his following distance.

The new campaign was launched on television in January 2014, supplemented with radio and billboard activity, and was available on the NZ Transport Agency website, as are all the current New Zealand campaigns. Immediately, the audience reaction online was explosive, with YouTube views reaching 1 million worldwide within 3 days and 8 million within the first month [Figure 5]. By comparison, a previous, highly successful road safety campaign, “Ghost Chips”, targeting young Maori drinking drivers, had also been widely viewed online but had taken two weeks to achieve 1...
million views. Further details of the advertising campaign can be found on the [Mistakes website](#) [NZ Transport Agency, 2014b].

!["Mistakes": YouTube views](image)

*Figure 5. Cumulative millions of YouTube views of the advertisement “Mistakes”, worldwide, during the first three months of the campaign*

Although high levels of viewership and enthusiasm were very pleasing, it was important to learn what people were understanding about this campaign. Reaction to the new campaign was monitored through the traditional means of online and telephone surveys, measuring recall, relevance, likeability and message takeout of the television advertisement. Additionally, conversations on YouTube and social media sites such as Facebook and Reddit were monitored and analysed for their content.

!["Mistakes": recall and relevance](image)

*Figure 6. Percentages of surveyed audience who recalled the TV advertisement “Mistakes”, liked the advertising, and found the advertising relevant to people like themselves*
The high levels of online viewership were reflected in high levels of audience recall levels on television. Early results from the audience survey indicate that within the first month, around 85% of the surveyed audience were aware of the campaign when prompted, with relevance over 60% and likeability around 50%, excellent early performance figures for a road safety advertising campaign [Figure 6]. Unprompted awareness of the advertising was also unusually high, at around 30% consistently over the first six months, and maintained this level almost regardless of the flighting of the television advertisement. Recognition of the advertisement may be high because of its strong imagery, readily brought to mind by outdoor advertising and online discussion.

Message takeout has also been good so far, with a developing theme that drivers need to be more aware how dangerous their speeding is to others on the road, along with the usual “slow down” message.

On social media, initial reaction to the “Mistakes” advertising was essentially positive and enthusiastic from most people [Figure 7]. There was also the usual feedback from people who like to speed that this was anti-speed propaganda or that the non-speeding driver was to blame. Within a short period, the feedback from on-line conversations indicated a shift in public mood. Each time that pro-speeders made their opinions known, people who supported the ideas in the advertisement responded to their comments, often quite fiercely. The language used is sometimes fairly direct and unprintable. Examples of these comments can be found on some of the YouTube sites which are running this video.

![Figure 7. Percentages of YouTube comments relating to the advertisement “Mistakes”, during the first month, categorised by sentiment as positive, neutral or negative](image)

The ability to respond to the advertising messages via social media seems to have allowed people who would have been considered a silent majority to voice their opinions about speed, particularly speeds which they perceive to be excessive for the circumstances. This has provided an opportunity to hear some counter-arguments to the more usually heard views of the proponents of speed or the anti-enforcement lobby.

**Conclusion**

Three new approaches to road safety advertising have attempted to broaden and change the public conversations about speed. The new messages have used some of the key safe system principles to reframe the way the public and the authorities talk about speed. The advertising has attempted to increase recognition of human vulnerability, to promote the idea that driving is a shared responsibility, and to foster greater tolerance of other people’s mistakes. These approaches adopt a more social basis rather than the more traditional targeting of specific behaviours with driver-focussed messages.
The human vulnerability message has achieved good audience awareness and increased agreement that injury severity is greater at higher speeds. The conversational aspects of this campaign have been obtained through the various surveys used to monitor the performance of the advertising. With the shared responsibility campaign, social media have been used to provide direct audience feedback and to discover the social, or non-social, behaviours which are of most concern to drivers and other road users. The most recent campaign has challenged people with the idea that anyone could make a mistake on the road, and it has led to a vigorous debate about the role of speed in such a situation.

New conversations have developed about speed as a result of these campaigns. People have increasingly linked speed to injury severity, and not necessarily the injury to vehicle occupants but to other road users. This illustrates a shift from in-vehicle personal driving considerations to a wider effect of their own driving on other people. In addition, through social media a wider range of opinions has been obtained, reflecting perhaps the views of a previously non-vocal majority. The discussion resulting from the new campaigns has also not been so much about enforcement or allowed speeds, but more about personal responsibility and appropriate speeds.

References


