

Helping Motorcyclists ‘Ride to Live’: developing a large-scale public education campaign for motorcyclists using research and stakeholder consultation

Lauren, Fong^a, Ralston, Fernandes^a, Evan, Walker^a, Martin, O’Reilly^a, Anja-Mia, Woodward-Watson^b, Nicole, Douglas^b and Gabrielle, Suchard^b

^a Centre for Road Safety, Transport for NSW, ^b Marketing and Communications, Transport for NSW

Abstract

Motorcyclists are over-represented in NSW road trauma. Motorcycles represent only 3.6 per cent of motor vehicle registrations but account for 15 per cent all road fatalities and 11 per cent of all road injuries.

Research was undertaken in 2012 to understand the knowledge, attitudes and behaviours of NSW riders and drivers in relation to motorcycle safety. The research revealed that riders place a high degree of importance on skills and their own riding abilities, as well as externalise blame for crashes. A key challenge was to develop campaign messaging that was relevant and credible to riders without reinforcing stereotypes that suggest riders are non-compliant, risk-taking road users.

The ‘Ride to Live’ campaign was subsequently designed around acknowledging motorcyclists’ passion for riding, whilst challenging riders to better manage their risks on the road. Campaign executions highlight common scenarios for commuter and recreational riders and illustrate the consequences of different choices riders can make in response to each hazard. It aims to encourage riders to make the safer choice – by anticipating the hazard and preparing early through good lane positioning, buffering and setting up brakes – without being too prescriptive and authoritarian. The campaign also encourages drivers to watch out for motorcycle riders.

Findings from the research were instrumental in developing an evidence-based campaign, along with strong collaboration with key stakeholder groups including NSW Motorcycle Alliance and Motorcycle Council of NSW. This extended to using important motorcycle networks to gain access to rider expertise and get a stronger campaign reach.

The need for a motorcycle campaign

Motorcycle riders are over represented in NSW road trauma, accounting for 15% of road fatalities and 11% of injuries while only making up 3.6% of registered vehicles in NSW.ⁱ Compared to drivers, motorcycle riders are at greater risk of fatality or injury as they are less protected in a crash. They have a fatality rate 23 times that of drivers (on a rate per kilometre travelled).

In the five year period from 2008-2012, there were 12,590 motorcycle crashes (including passengers) resulting in 297 motorcycle fatalities and 12,816 motorcycle injuries. Over the five year period, motorcycle casualties (injuries and fatalities) increased by 12%, three times more than all other road user casualties (4%).

Currently there are about 550,000 motorcycle licences in NSW (about 10% of all licences on issue) and about 200,000 registered motorcycles. However there is evidence of very strong growth in the number of motorcycle licences on issue.

In the five years since 2008, the number of motorcycle registrations grew by 28% compared to the number of passenger vehicle registrations which only grew by 9%. This increase in motorcycle registrations corresponds with the increase in motorcycle crashes. In future, there is the potential risk that motorcycle casualties may increase at a substantial rate, commensurate with registrations.

While the popularity of motorcycle riding is continuing to grow in NSW, saving motorcycle riders' lives and preventing injuries is becoming an increasingly critical road safety challenge for Transport for NSW.

The previous motorcycle rider campaign was 'Cornering' which encouraged riders to undertake safe riding techniques at corners and tight bends. While the 'Cornering' campaign was well received, the limitation of this campaign was that it only focussed on one element of the overall riding experience (particularly for recreational riders) and did not acknowledge the key risks for commuter motorcycle riders or the role of drivers in motorcycle crashes.

The role of the new motorcycle risk management campaign 'Ride to Live' is to encompass both motorcycle riders and drivers in the one campaign across a number of hazardous situations. This in turn will lead to better management of the risks contributing to motorcycle crashes.

NSW Motorcycle Safety Strategy

Motorcycle risk management is a key focus in NSW and actions and long-term initiatives to reduce the motorcycle road toll are articulated in the NSW Motorcycle Safety Strategy 2012-2021. The Strategy was developed by the NSW Centre for Road Safety along with the motorcycle community and key road safety stakeholders. Key actions include the development of targeted communication campaigns to address motorcycle crash risks through increased awareness of motorcycle safety and assisting riders to better manage risks on the road.

Stakeholder engagement has played an essential role in the development of the Strategy in terms of identifying and understanding the unique road safety risks for motorcycle riders and the need for a targeted safety improvement approach. Engaging with the motorcycle community, in particular the NSW Motorcycle Alliance and Motorcycle Council of NSW, has provided valuable insights into the specific risks and countermeasures that apply to motorcycle riding, due to different patterns of travel, environmental influences and the greater physical and cognitive demand required for riding compared to driving.

As part of the Motorcycle Safety Strategy, the Centre for Road Safety leads a Motorcycle Implementation Working Group with regular meetings to develop, implement, monitor and evaluate initiatives in the Strategy. The working group has also provided an important opportunity to discuss motorcycle risk management issues and consult with key motorcycle stakeholders throughout the development of this communications campaign.

The working group includes NSW Motorcycle Alliance, Motorcycle Council of NSW, Australian Motorcycle Council, NRMA Motoring and Services, NSW Police, Local, Government and Shires Association, Motor Accidents Authority, Roads and Maritime Services and Federal Chamber of Automotive Industries.

Evidence Gathering

NSW crash data analysis

Motorcycle riders can be divided into two groups based on the main purpose of their journey, commuter riding (for work or education) and recreational riding.

A commuter rider is a person who rides a motorcycle as a mode of transportation to and from their work or place of education during key commuter times. For the purposes of analysing crash data, this was defined as weekdays in the morning, 6am to 10am, and afternoon/evening, 3pm to 7pm. A recreational rider is a person who rides a motorcycle for enjoyment typically on the weekend.

An analysis of NSW crash data revealed distinct crash patterns for commuter and recreational motorcycle riders. Commuter riders are more commonly involved in lower speed crashes and crashes with other vehicles, particularly at intersections or in rear-end and lane change collisions. Recreational riders have a higher incidence of high speed, single vehicle crashes due to loss of control on both straight and curved roads.

The characteristics of the casualty crashes experienced by these two motorcycle groups are outlined in the following table.

Table 1. Characteristics of casualty crashes for commuter and recreational riders

| | Commuter motorcycle riders (including scooter riders) | Recreational motorcycle riders |
|---|---|---|
| Where do motorcycle crashes occur in NSW? | <ul style="list-style-type: none"> • A higher number of casualties occur at intersections. • Over a third occur on 50km/h or 60km/h roads. • The majority of crashes occur on straight and dry roads. | <ul style="list-style-type: none"> • Over-represented in motorcycle fatalities in country areas. • Over-represented on 80km/h to 100km/h roads. • Over-represented on curved roads. |
| What time of the year do most crashes occur? | <ul style="list-style-type: none"> • There is little seasonal variation between when commuter motorcycle rider casualties occur. • However, there is a slight peak in commuter motorcycle rider casualties in Autumn and Spring. | <ul style="list-style-type: none"> • There is little seasonal variation between when recreational motorcycle rider casualties occur. • However, there is a slight peak in recreational motorcycle rider casualties in Autumn and Spring. |
| What time of the week and day do most crashes occur? | <ul style="list-style-type: none"> • Casualties peak in the evenings on weekdays from 5pm to 6pm. | <ul style="list-style-type: none"> • Casualties peak in the middle of the day on weekends from 11am to 3pm. |
| How do most crashes occur? | <ul style="list-style-type: none"> • The majority of commuter rider casualties involve multiple vehicle incidents, where the car was the key vehicle. • The most common crash types for multi-vehicle crashes are intersection crashes (turning crashes). • Multi-vehicle crashes at non-intersection locations are also common (rear-end/lane change collisions). | <ul style="list-style-type: none"> • A higher number of recreational rider casualties involve single vehicle incidents involving impact with a fence/safety barrier or animal. • In multi-vehicle crashes, the key vehicle is more likely to be the motorcycle. |

Multi-vehicle crashes involving drivers and riders most commonly occur at intersections, particularly unsignalised T-intersections. They typically involve a vehicle turning from an adjacent or opposing direction into the path of an approaching motorcycle.

However crashes at non-intersection locations are also common such as when a vehicle collides with a motorcycle while changing lanes. These crash types suggest that the driver of the motor vehicle failed to detect the motorcycle rider or was in some way obstructed from detecting the motorcycle rider during these key manoeuvres. Key elements which may obscure driver vision and lead to crashes with motorcycle riders, both at intersections and when travelling in the same direction include:

- Motor vehicle blind spots
- Other vehicles
- Roadside objects
- Acceleration of motorcycle riders
- Motorcycles being smaller and more difficult to see in the traffic mix
- Motorcycle riders getting to the head of the queue.

Attitudes and behaviours of motorcycle riders and drivers

The issue of motorcycle risk management is complex in its nature. There are multiple target groups with differing behaviours and different attitudes towards the issue and each other. In 2012, quantitative research was undertaken to gain an in-depth understanding of the knowledge, attitudes and self-reported behaviours of NSW riders and drivers in relation to motorcycle safety.ⁱⁱ This consisted of an online survey of three groups: an online panel based sample of n=948 motorcycle riders and passengers weighted to reflect the population of NSW motorcycle licence holders; an open sample of n=1036 motorcycle riders sourced from a link placed on NSW motorcycle club and association websites; and a sample of n=997 drivers weighted to reflect the population of NSW driver licence holders.

The additional open sample helped ensure that the attitudes and behaviours of the active motorcycle riding population were captured. Research suggests that motorcycle licensing data over-estimates the number of active riders, in jurisdictions such as NSW where motorcycle licences are automatically renewed with the drivers licence even if the licence holder no longer rides a motorcycle.ⁱⁱⁱ

Visibility and inattention were key concerns for both motorcycle riders and drivers. One fifth of drivers said that they have concerns about sharing the road with motorcyclists (21%). Drivers' concerns related to rider visibility and riding behaviour of motorcyclists. Drivers who have had a close call involving a motorcycle rider, and who attributed the close call to their own driving behaviour, stated the most common factor was they did not see the motorcycle rider (40%). This was most commonly due to heavy traffic, followed by poor visibility and weather conditions. Overall, many of the drivers surveyed gave responses which indicated that they have negative perceptions of motorcycle riders (61%) including concerns with riding behaviour such as weaving in and out of traffic and unpredictable manoeuvres of motorcycle riders. This was particularly evident among drivers under 50 years of age and those living in metropolitan areas.

Motorcyclists said that they were particularly concerned about their own visibility. Among motorcycle riders who had crashed, many attributed the cause of the crash to the inattention of the other road user (37%) and the other road user not seeing them (27%).

The common ground between drivers and motorcycle riders was that both groups thought that drivers and riders shared equal responsibility for the safety of motorcycle riders (73% of riders and 82% of drivers).

The research also highlighted key differences between the two motorcycle rider samples. Survey participants of the open sample (sourced through motorcycle club and association websites) were

more likely to ride more frequently, report being involved in a crash or close call, and blame the other road user for the crash or close call. This group also had a much lower perception of risk and were more focussed on rider skills and the role of other motorists in crashes.

Riders in the open link sample were more concerned about the inattention of other drivers (43% vs. 32%) and were more likely to think that the driving behaviour of the other motorist was the main factor in motorcycle crashes (44% vs. 37%). While a greater proportion of the open link sample reported exceeding the speed limit every time or most times they rode (49% vs. 27%) these riders were less likely to think rider behaviour, such as speeding, was mainly to blame (16% vs. 28%). Where rider behaviour was involved, this group was more likely to think that motorcyclists' riding beyond their ability was the main factor (47% vs. 20%).

Table 2. Key differences between the two sample in terms of sample characteristics and attitudes and behaviours

| | Open sample | Panel ample |
|---|--------------------------|--------------------------|
| Members of motorcycle clubs, groups or associations | 43% | 9% |
| Held a motorcycle licence | 98% | 71% |
| Owned a motorcycle | 97% | 62% |
| Rode most commonly as a rider (as opposed to a passenger) | 99% | 78% |
| Frequently rode on-road | 90% | 54% |
| Experienced a crash or close call with another vehicle(s) | 30% and 82% respectively | 23% and 53% respectively |
| Experienced a crash on their own | 41% | 32% |
| In terms of close calls, likeliness to blame another road user | 78% | 62% |
| Strongly disagreed that there's no such thing as safe speeding | 27% | 12% |
| Exceeded the speed limit every time or most times they rode | 49% | 27% |

Following the results of the 2012 attitudinal research, segmentation analysis was also conducted in 2013 to identify whether there were any subgroups of motorcyclists who were at particular risk of being involved in crashes as a result of their risky riding behaviours.^{iv} The analysis suggested a correlation between the number of years a motorcycle licence was held and reduced perception of risk. In other words, as a motorcycle rider's level of experience increases so too does their confidence in their riding ability, which in turn leads to a decrease in the perception of the risks of riding.

Campaign development

Campaign objectives

The overall communication objective for the motorcycle risk management campaign is to assist motorcycle riders and drivers to better manage risks that can lead to motorcycle crashes. A key challenge was to not only encompass motorcycle riders and drivers in the one campaign, but also to acknowledge the two distinct commuter and recreational rider groups and deliver messages which are contextually relevant to each one.

Target groups

There were two core target groups identified for the campaign - commuter motorcycle riders and recreational motorcycle riders.

Commuter rider casualties account for around 35% of all motorcycle casualties. While males in the 17-49 year age group account for 73% of all rider casualties, the 17-29 year age group are over-represented in commuter rider casualties. While scooter riders are a subset of the commuter rider group from a riding and crash pattern perspective, results from focus group testing revealed that scooter riders do not commonly identify themselves as motorcycle riders. Similarly, scooter riders are viewed as a distinct group by motorcycle riders, hence the need for targeted communications for this group.

Recreational rider casualties account for around 31% of all motorcycle casualties. While males in the 17-49 year age group account for 73% of all rider casualties, the 30-49 year age group make up the greatest number of recreational rider casualties.

The secondary target group is drivers, with a skew towards male drivers aged 17-54 years.

Campaign approach

The research evidence highlighted motorcycle riders' tendency to place a high degree of importance on skills and their own riding abilities, as well as externalise blame for crashes.

This posed a number of barriers and challenges which needed to be taken into account when communicating to this audience. Firstly, motorcycle riders are unlikely to accept communication materials which are perceived as reinforcing stereotypes that suggest they are non-compliant, risk-taking road users. This would have led to resistance of the message. As a result, the challenge for the communication strategy was to communicate positive strategies which empower motorcycle riders to better manage their own risks on the road such as helping them identify potential hazards rather than dictating what riders should do.

Secondly, tackling a motorcycle rider's decreasing perception of risk over time, as experience and confidence increases, was another challenge. However, by highlighting hazardous situations which all motorcycle riders face on the road, this reinforced the need to remain aware and mindful on the road at all times. Further, with the sense of freedom, passion and underlying pride most motorcycle riders enjoy, the communications did not limit or curtail this pay-off to avoid the message being rejected. Using a peer-to-peer tone of voice and partner style approach in communications assisted with this.

Lastly, as part of the overall motorcycle risk management issue, it was important to acknowledge both motorcycle rider and driver responsibility, without imparting blame on any one party. This would help to overcome some of the negative perceptions held by drivers and motorcycle riders towards one another and the tendency of both groups to externalise blame.

A strategic platform was developed to help inform the campaign so that it would resonate across the diverse target audiences and transcend the identified barriers and challenges to communicating motorcycle safety messages. The strategic platform identified the need to target self-efficacy or pride amongst riders and drivers and reduce their self-rated ability to perform a particular behaviour by illustrating and educating them on risk management skills. Simultaneously, there was also a need to change attitudes towards high risk interactions within and between target groups with the common goal of reducing motorcycle road trauma.

Creative development

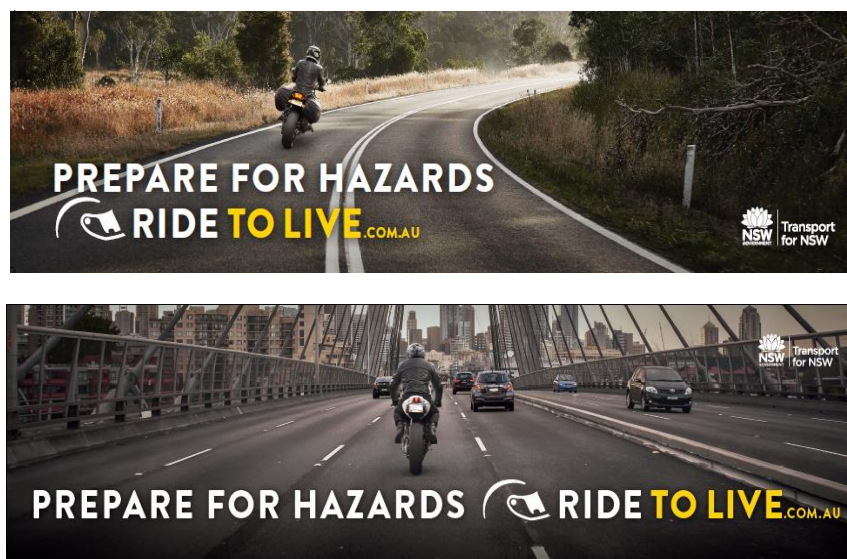
Based on the insights gained from the research, the campaign was subsequently designed around highlighting common hazards that riders face on the road and illustrating the consequences of different choices riders can make in response to each hazard. The results of the crash data analysis were instrumental in informing the particular scenarios depicted in the campaign. For example, a vehicle turning into the path of an approaching motorcycle rider or a vehicle collision with a motorcycle while changing lanes is more common for commuter motorcycle riders. However for recreational motorcycle riders, losing control on a curved or straight road is more common.

Campaign executions include 30 second and 15 second television advertisements featuring metropolitan and rural locations to target the specific crash types and risk management strategies for commuter and recreational riders. The 30 second advertisements show a motorcycle rider approaching a hazard, and then splitting into three versions of itself. Each ‘clone’ rider takes a different approach in responding to the hazard – for example, one ‘clone’ rider makes the safer choice and successfully navigates through the hazard whereas the other two ‘clones’ make higher-risk choices and are unsuccessful in continuing their ride.

The campaign aims to challenge riders to better manage their risks by anticipating hazards and preparing early through good lane positioning, buffering and setting up brakes without being too prescriptive and authoritarian. A strong collaborative approach with NSW Motorcycle Alliance and Motorcycle Council of NSW was critical to ensure the campaign messages were relevant and credible to riders, and effectively addressed the unique road safety challenges for commuter and recreational rider groups.

When tested amongst the target audience, the focus group participants related to the ‘Ride to Live’ concept because it not only focused on hazards on the road, it also allowed motorcycle riders to think about how they would respond to the hazards in their own way.^v This was a key objective of the campaign to empower motorcycle riders to identify and manage their own risks on the road. Further, the central proposition ‘Ride to Live’ was seen as an immediately identifiable positive road safety message which celebrates the joy of riding, while reminding motorcycle riders that, whatever the reason they choose to ride, they should draw on all their knowledge and experience to always ride at the best of their ability (see Figure 1).

Figure 1. Campaign creatives – recreational rider and commuter rider execution



The 'Ride to Live' creative received a good response from drivers as well, with the feedback in line with that of motorcycle riders. Drivers understood the hazards and their role in improving the safety of motorcycle riders even though it was talking to motorcycle riders directly.

A tailored driver execution was also developed to challenge drivers to think about how closely they look for motorcyclists and to remind drivers to check blind spots and look out for motorcyclists at all times. It links to the rider creative through the tagline 'help motorcyclists ride to live' which is relevant to them (see Figure 2).

Figure 2. Campaign creative – driver execution

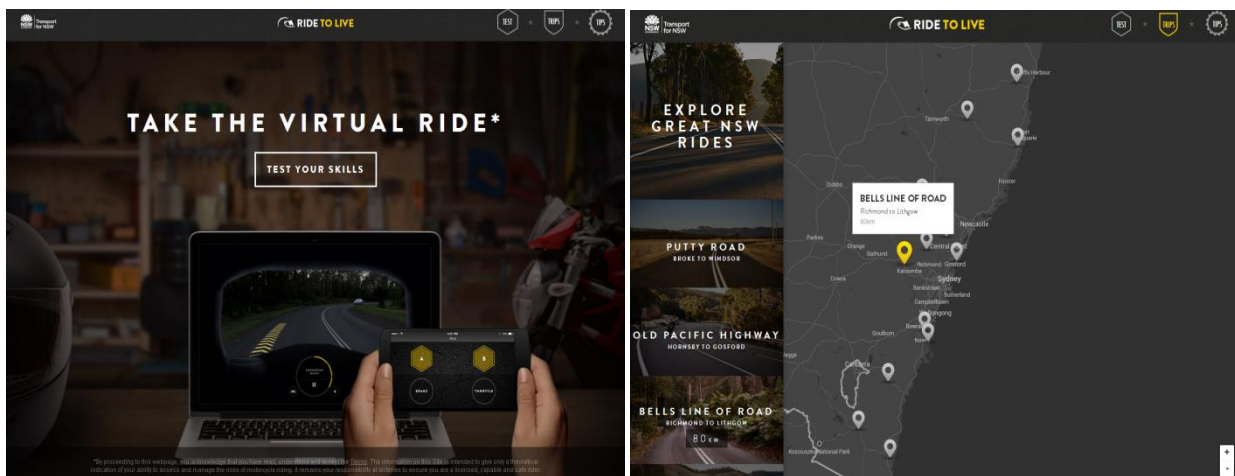


As scooter riders view themselves differently from motorcycle riders, a separate creative execution was developed for this audience.

In addition, outdoor billboards play an important role in reaching riders and drivers on the road at the point of behaviours, where they are making decisions and preparing for hazards. The billboards are strategically placed at key locations based on: rider registration data, crash data, NRMA red flagged road surveys, Roy Morgan Data, popular motorcycle routes, previous motorcycle campaigns and motorcycle parking locations.

The television campaign is fully integrated and supported with a website (ridetolive.com.au), which includes online hazard tests based on key crash types for commuter and recreational riders (using real footage), safety tips, and a trip planner of popular recreational riding routes in NSW featuring hazard information, recent crashes, weather, traffic and places to stop (see Figure 2). This provides a strong call to action, particularly to drive riders to the digital and social environment to access further information on hazards and risk management strategies, which is a significant element of the campaign.

Figure 2. Extracts from ridetolive.com.au



Stakeholder consultation

Extensive stakeholder consultation was used to inform the development of the new 'Ride to Live' campaign. The two key stakeholders involved were the NSW Motorcycle Alliance and Motorcycle Council of NSW. Both organisations represent the needs of motorcycle riders across the state and were involved in all phases of the campaign development, from the concept stage through to filming and production. A motorcycle rider trainer was also engaged during the filming process to ensure that the riding techniques used by the motorcycle riders in the campaign were accurate and safe. These relationships enabled stakeholder channels to be leveraged ensuring effective promotion, support and credibility of the campaign within the motorcycle community.

NSW Motorcycle Alliance, Motorcycle Council of NSW and NSW Police Force were also involved in promoting the 'Ride to Live' message through their own existing communication channels.

Campaign success

The campaign launched in November 2014. This enabled the new 'Ride to Live' messaging to be established and allow awareness of the campaign to build over the peak recreational riding season.

Online surveys were conducted before and after the campaign launch, with key findings relating to riders including:^{vi}

- Recognition of the campaign was very high across all media channels. Almost 75% of motorcycle riders in the post-wave recalled at least one element of the campaign. TV, outdoor and radio channels were seen by around 1 in 2 riders.
- 70% of commuter riders thought the 30 second commuter TVC and 79% of recreational riders thought the 30 second recreational TVC communicated to them the need to be aware of potential hazards on the road when riding.
- 63% of commuter riders and 67% of recreational riders thought the relevant 30 second TVC made them think about the consequences of different choices motorcyclists can make when riding.
- Message take-out was strong and successfully related to hazard perceptions. While there were various interpretations of the hazards message because of the various scenarios depicted across the TVCs, overall the campaign successfully communicated the need to be aware of / prepare for hazards.
- 80-90+% of riders already self-report riding in a safe manner, for example slowing down on corners, leaving a safe braking distance and scanning the road for potential hazards. As such, achieving an observable change in behaviour is difficult. At this early stage, there were few observed campaign effects in the current behaviour of riders between the pre and post waves.
- The campaign appeared to have increased the likelihood of riders starting corners wide, particularly amongst recreational riders, from 43% pre wave to 57% post wave.

Key findings relating to drivers included:

- Overall the campaign achieved strong levels of recall amongst drivers, but the rider targeted executions were also highly visible to drivers.

- There was strong agreement among drivers that the driver execution communicated the need for drivers to ‘look for motorcyclists’ (67%) and for drivers to ‘be aware of the risks they pose to motorcyclists’ when driving (54%).
- When looking at change in behaviour due to campaign exposure, those exposed to the campaign indicated that they specifically looked out for motorcyclists on the roads around them compared to those who were not exposed to the campaign.

Ongoing campaign tracking throughout the year will continue to provide insights on how the campaign is performing and help inform any changes to the campaign.

In addition, the response to ridetolive.com.au has been extremely positive. Since its launch in October 2014, there have been more than 93,000 users, spending an average of over 3 minutes on the site (as at 23 June 2015). Visits to the website have been slightly higher amongst commuter riders than recreational riders (20% vs 10%) and those who visited the website were also very likely to take the online hazard test. Almost 65,000 tests have been completed (as at 23 June 2015), sharing the benefit of providing relevant and useful information in an interactive and engaging format.

Further evolution of the campaign will be considered in the future to ensure continued awareness, relevance and effectiveness for riders in the target audience. Transport for NSW is also working with the motorcycle community and key stakeholders to develop the next three years of actions within the Motorcycle Safety Strategy, which will include enhancements to the ‘Ride to Live’ website.

Summary

The ‘Ride to Live’ campaign is the first integrated motorcycle education campaign in NSW. It targets both riders and drivers through television, outdoor, digital and radio advertising. The campaign aims to highlight scenarios which put motorcyclists at risk, and encourage riders to make safe decisions in order to manage their risks on the road. It also promotes safer interactions between drivers and motorcycle riders by alerting drivers to the risks they pose to riders.

The results of the crash data analysis and quantitative research were instrumental in the development of the new campaign, and were considered at every stage to ensure the campaign messages were relevant and credible to riders, and effectively addressed their unique road safety challenges. This was also achieved through a strong collaborative approach between teams within Transport for NSW and key motorcycle stakeholders including Motorcycle Alliance and Motorcycle Council of NSW.

References

ⁱ NSW crash data 2008-2012 and Roads and Maritime Services Licence data.

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