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Contributed articles

How a diamond made trucks glow in the dark

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Abstract

In 2015, Toll Group is trialling the addition of 3M™ Diamond Grade™ Reflective Tape to the sides and rear of truck trailers to increase trailer visibility at night, with a view to making this a national requirement across its fleet in 2016. It is a simple, fast, cost-efficient and immediate road safety action. This new collaboration between 3M and Toll is a direct outcome of the Amy Gillett Foundation (AGF) winning the 3M-Australasian College of Road Safety Diamond Road Safety Award. In November 2014, the Amy Gillett Foundation was awarded this prestigious Award for road safety innovation for *Cycle Safe Communities*. *Cycle Safe Communities* is an online platform created to enhance collaboration with local councils and community groups to deliver high-quality, consistent cycling safety messages nationally.

After receiving the Award, David Lee, Head of Partnerships AGF, visited 3M's Innovation Centre in Sydney, presented at the American Road Safety Conference (ATSSA) and toured 3M's Global Innovation Centre and Headquarters in the USA. These visits sparked ideas on how 3M's reflective technologies could improve cyclist safety in Australia and led to the collaboration with AGF corporate partner, Toll.

The Amy Gillett Foundation is Australia's leading bike rider safety organisation. Its mission is to create a safe cycling environment however, safety benefits from linking 3M and Toll will benefit all road users not just cyclists. AGF is in discussion with 3M about increasing bike riders' visibility and with Europcar to explore how 3M technology can be applied to their vehicle fleet to improve safety for all road users.

3M-ACRS Diamond Road Safety Award – Amy Gillett Foundations' Cycle Safe Communities

Across Australia, cycling safety messages were repeatedly being reinvented. Councils, organisations and community groups have limited resources available for safety campaigns and often a large proportion of available resources (people, finances and time) are spent researching and developing new content. This creates two significant issues, 1) limited delivery as resources are expended in message development leaving limited capacity for delivery and 2) re-inventing messages and conflicting inter and intra-community messages lessen the impact.

To address this issue for cycling safety messages, the Amy Gillett Foundation (AGF) developed Cycle Safe Communities. As the lead Australian cycling safety organisation, the AGF has centralised bike safety messaging with a central repository of campaigns that community groups and the public can use. This minimises production and content development costs and maximises the delivery and impact of the road safety messages. Cycle Safe Communities material is available through the AGF website and was developed with the support of VicRoads and the TAC. From the website, the community (individuals and organisations) can access substantial bike rider safety campaigns including *a metre matters*; *It's a Two-Way Street*; and *Sharing Roads and Paths*.

In November 2014, the AGF was awarded the 3M-ACRS Diamond Road Safety Award for the Cycle Safe Communities initiative. Following the presentation, the award also included a tour of the 3M innovation centres in Sydney and the USA.

3M-ACRS Diamond Road Safety Award – tours and conference presentation

David Lee Head of Partnerships AGF, visited 3M's Innovation Centre in Sydney and discussed how 3M technology solutions could be potentially modified and applied in order to help improve visibility of bicycle riders both in terms of clothing and the bike itself. This was followed by David's visit to the 3M Global Innovation Centre in Minnesota; an extensive tour of the 3M Headquarters; and discussions of 3M solutions and how product innovation directly contributes to road safety. Specifically, demonstrations and discussion focused on how 3M safety solutions help to reduce incidents using reflective sheeting to increase vehicle visibility; and the importance of wet visibility of pavement markings.

This was followed by attendance at the 45th Annual US Convention and Traffic Expo: themed "Connect. Collaborate. Create." David presented to the Safety and Public Awareness committee meeting about the Amy Gillett Foundation's work to reduce serious injuries and deaths of bike riders in Australia. This included an overview of geographic and cultural challenges; and advancements in legislative review and change; in supporting the Foundation's mission and vision.

New partnership for improved road safety

Following the travel component of the award, the AGF connected 3M with a key AGF partner, Toll Group, which led to discussions about the application of reflective tape to the perimeter and rear of its long haul heavy vehicle fleet. This tape, that reflects the outline of the truck trailer to alert other road users to the size of the heavy vehicle, is mandated in the US. Since these initial discussions, Toll has implemented the white and red Diamond Grade™ Reflective Tape to the side and rear of a prototype vehicle. Through 2015, Toll will continue to apply the tape to 23 of its B-double heavy vehicles with a view to roll this out

across a further 200 vehicles within its fleet over the next two years.

Toll Linehaul and Fleet Services General Manager Ross Longmire said Toll places a priority on the safety of its people and the communities in which it operates.

"As the largest mover of freight in Australia we have a responsibility to lead by example and help to educate people to share the road more safely," Ross said.

Conspicuity of road users at night is a key road safety issue that impacts all road users. This new partnership, facilitated by the 3M-ACRS Diamond Road Safety award will have a lasting impact on the visibility of heavy vehicles to other road users at night.

Conclusion

Winning the 3M Diamond Road Safety Award has led to positive outcomes for the Amy Gillett Foundation and for road safety more broadly. Recognition of the AGF's work has helped to increase the profile of the Foundation and, more importantly, increased the awareness of the need for more action to improve safety for bike riders. The award provided the AGF with opportunities to develop a new working partnership with 3M which in turn led to opportunities with 3M and Toll, Europcar and Subaru. The Award provided a way to enhance existing relationships with corporate partners from within the road transport and automotive sectors that has already led to direction action for safer outcomes on Australian roads.

"We could never have afforded to send one of our team overseas for something like this without the opportunity offered to the Foundation through winning the 3M Diamond Road Safety Award" said Belinda Clark, Interim CEO Amy Gillett Foundation. "We are very grateful to the ACRS and to 3M for this investment in us, and in safety for cyclists in a very practical way" she said.

Acknowledgements

The authors wish to thank the Australasian College of Road Safety and the 2014 selection committee for recognising the Amy Gillett Foundation with the 2014 3M-ACRS Diamond Road Safety Award. In addition, particular thanks are extended to 3M for their vision in creating and sponsoring the Awards and to the executive and management team of the American Traffic Safety Services Association.