

## 2019 3M-ACRS Diamond Road Safety Award Winner

“Hold the Red: Radar-based intersection collision avoidance system” – Queensland Department of Transport and Main Roads project winner announcement

A Queensland-based crash avoidance system has taken out one of Australasia’s premier road safety awards, the 3M-ACRS Diamond Road Safety Award. The 3M-ACRS Diamond Road Safety Award recognises exemplary innovation and effectiveness in saving lives and injuries on roads.

The winning project, titled '**Hold the Red: Radar-based intersection collision avoidance system**', was led by Peter Kolesnik, Director of Road Safety Programs at the Queensland Department of Transport and Main Roads (TMR). Team members on the project were Allan Hales, Manu Hingorani, Connor Broe, Denis Floyd, and Matt Baylis.

The 3M-ACRS Diamond Road Safety Award was presented last night by Mr Llew O'Brien, Federal Member for Wide Bay, QLD, along with Mr Martin Small, President of the Australasian College of Road Safety (ACRS), and Mr Andrew King, Group Business Manager for 3M Transportation Safety Division and 3M Commercial Solutions Division, Australia and New Zealand. The award ceremony was attended by over 500 of Australasia’s foremost road safety professionals and advocates attending the ARSC2019 Conference Gala Dinner and Awards ceremony at the Adelaide Convention Centre.

Mr O'Brien congratulated all of this year’s award winners for their contribution to improving road safety throughout Australia. “Thank you to everybody who has organised events and campaigns to focus the nation’s attention on this important issue”, he said.

“Every life lost on our roads is a tragedy, especially for the victim’s family and friends, but it also has a ripple effect on local communities” Mr O'Brien said. “Road safety should be a priority for all of us and we can all do our part to help make Australia's roads safer.”



ACRS President, Mr Martin Small, said "The Australasian College of Road Safety is delighted to continue our association with 3M in this highly sought after award. Congratulations to this year's winner, Peter Kolesnik and his team at Queensland Transport and Main Roads, for their well-researched application of a proven system to protect the life and health of people in our road traffic system."

3M representative Mr Andrew King said "3M is proud to again support this award, now in its 9th year and congratulates Peter and his team at TMR Queensland for the win. Through collaboration, innovation and team work this program shows what can be achieved through new technology in road infrastructure to assist in reducing road trauma on our roads. A well deserved 3M-ACRS Diamond Road safety award winner that could be replicated globally in our target toward zero."



Hold the Red (HTR) is an intelligent crash avoidance system that is installed into the Traffic Controller Cabinet at signalised intersections using a virtual loop card. The system uses radar to track each vehicle approaching an intersection up to 150m from the stop bar. This range provides the advantage of using radar over other alternatives such as existing induction loops as the radar system can dynamically track the speed of vehicles and predict when a vehicle approaching an intersection will not be able to stop in time. When such a vehicle is detected, HTR instructs the signal controls to extend the all-red phase by an extra two seconds. Law-abiding drivers in cross traffic lanes do not enter the intersection, reducing the chances they will enter into a potentially hazardous situation.

The Department of Transport and Main Roads (TMR), in conjunction with the Queensland Police Service (QPS), are trialling HTR at four intersections in South East Queensland. Installation at these sites was carried out between August and October 2018.

Queensland University of Technology Centre for Accident Research and Road Safety - Queensland (CARRS-Q) is conducting an independent evaluation of the functionality and road safety benefits of HTR. As at 27 May 2019, HTR had been activated approximately 14 times per day since installation across all four sites, with 3514 total activations. HTR has improved the safety of vehicles and pedestrians at each intersection where it is installed by reducing the risks of a collision due to red

light running. There have been no recorded fatalities due to red light running at these intersections since installation.

Finalists for the 3M-ACRS Diamond Road Safety Award came from many areas including local and state government groups, police, not-for-profit organisations, industry associations and private companies.

Judges of the award evaluated all the entries in terms of problem solving, innovation in technology and thinking, and the benefits in reducing trauma. Cost-effectiveness and transferability to other areas were other key criteria.

### **Highly Commended Winners for 2019:**

- **'PrepL: Innovation in Novice Driver Learning and Assessment'** Adam Higgins, Director, Project Delivery - Queensland Department of Transport and Main Roads; Team Members: Nadine Dumont and Leanne Edmonds
- **'Raised Centre Road Tactile Road Markings'** Martin McLachlan, Office in Charge Mansfield Highway Patrol, Victoria Police; Team Member: Nathan Matthews (Vic Roads)
- **'ARILITY: Augmented Reality Road Safety Learning for Schools'** David Gribble, Chief Executive Officer, Constable Care Child Safety Foundation; Team Member: Ian Sloan



As the winning team leader, Peter Kolesnik will travel to the USA to visit 3M Global Headquarters in Minnesota. The ACRS and members of the road safety community across Australasia congratulate Peter Kolesnik and his team on their outstanding contributions and their 2019 3M-ACRS Diamond Road Safety Award win.