

The Federal Government has provided valuable financial support to AusRAP through the Australian Transport Bureau (ATSB). In its 2007–08 Federal Budget submission, AAA called on the government to use the AusRAP star ratings to complement the Black Spot program with a new, \$400 million program to that proactively identifies and targets low-cost, high return priorities for the AusLink national network.

In particular, it is increasingly clear that, for any significant attempts to bring down the level of crash fatalities and serious injury, there needs to be a heightened focus on addressing roadside hazards. This is a challenge for all who want to see the NRSS target achieved – governments, the community and road safety bodies.

Retrospective on Road Safety Visits to Sweden and Ireland

by **Graham Smith, Driver Training Centre, Gympie, Queensland**

This is a shortened version of a talk presented at the December 2006 meeting of the Queensland Chapter of the College.

A visit to Europe in 2005 brought my wife Lyn and I into contact with a number of Road Safety practitioners. Out of these contacts came an invitation to visit Sweden to have a look at the “Vision Zero” concept. It also resulted in an invitation to present a paper and conduct a workshop at the *Vision in Vehicles* Conference in Dublin, Ireland, in July 2006. I have been a Senior Road Safety Educator at Roadcraft in Gympie, Queensland for more than 20 years. In common with all other educators in our organisation I work part-time. Roadcraft is a not-for-profit organisation started nearly 30 years ago by members of the local Rotary clubs with the help of other service organisations.

Road Safety in Sweden

My host in Sweden was Mr Thomas Lundgren of the Trafiksakerhets “Skid Training” Centre, at Gillinge, just outside Stockholm. We were joined for the day by Mr David Wilde from Vision Zero, which is a section of the Vagverket or Transport Department in Sweden.

Vision Zero

Vision Zero is an image of a future in which no person will be killed or seriously injured on Sweden's roads. It was ratified by the Swedish Parliament as a national policy in 1997. Vision Zero establishes that the loss of human life or suffering serious injury on the road is unacceptable. It recognises that there is no single factor that causes road crashes, therefore there is no single factor that will prevent road trauma. Vision Zero takes an integrated approach and considers that road safety education, road design and construction, vehicle design and law enforcement are all inter-related. Vision Zero requires thorough investigation into every crash that results in serious injury or fatality. These investigations must be carried out independently of any court of law or insurance consideration and must be carried out solely with the view of reducing death and injury.

Skid Training

Skid Training is one mandatory element of the licensing procedure in Sweden. A 4½ hour course is attended by every person before a driver's licence is granted. Eighteen years is the minimum age at which a person can hold a licence in Sweden. In practice, most young people do not receive a driving licence until they are between 19 and 20 years of age.

There are a number of Trafiksakerhets or Skid Centres in Sweden that are either privately or municipally owned. They are co-ordinated by the Transport Authority to ensure consistent presentations and outcomes. Each instructor teaches a class of 8 students using 4 cars. In-car activities are controlled by one-way radio broadcast and a remote control engine kill switch. A bitumen road circuit is used which contains a skid section covered by a plastic material that has the same frictional coefficient as ice when it is kept wet. Sprinklers are used to wet the surface and are turned off as the participating car approaches the skid area. This allows clear vision during the skid sequence.

This training is orientated towards students experiencing a skid situation and its potential outcomes. The students are taught braking and energy concepts where the physics and dynamics of energy are thoroughly explained. They are also shown some crashed cars that have collided with and killed animals such as moose, wild boar and deer etc. The preserved bodies of these unfortunate animals are also displayed. These courses would serve to warn drivers to slow down where skids are likely but would do little to identify such danger areas or deal with a skid situation should it occur.

It is interesting to observe that many of my Australian road safety colleagues who speak against the concept of skid training often quote Sweden as being in the forefront of Road Safety, but omit any reference to skid training in that country. Perhaps we need to look to a third country, Canada, where I witnessed a skid training technique that would be very unlikely to psychologically stimulate the typical young “hoon” or be too challenging for the timid or over-cautious driver.

Vision in Vehicles Conference, Dublin, Ireland, July 2006

This conference, at which over 30 papers were presented, was the eleventh in a series of biennial meetings to foster research into the role of vision in the use of all vehicles across the transport sector. The presenters came from throughout the world, some from university research departments and some from vehicle manufacturers. I had been invited to present a paper and conduct a workshop on young drivers involved in motor vehicle crashes. In this paper I presented Roadcraft's history, educational philosophy and some of our teaching/learning techniques.

I said that our responsibility is to identify and integrate physical, psychological and technical aspects of road use into driving in a manner that achieves safe, effective and responsible use of our roads. A shift in preconceived notions and sometimes archaic methodologies used by some road use educators is needed to bring road use and road safety into the forefront of all vehicle controllers minds, thus enabling a more harmonious union between all road users.

At Roadcraft we do not accept failure. Success is indicated by the level of intellectual and sensory learning of each and every individual who comes to Roadcraft and the extent to which it affects an attitudinal change that is paralleled by changes in their behaviours. These high expectations are often found daunting by new Road Safety Practitioners at Roadcraft. Only those instructors who are able to accept these high expectations, and can produce these outcomes, remain long-term educators at Roadcraft.

Vision Techniques have evolved over time that assist in developing dynamic vehicle understanding and use. Haptic, Visual and other Sensory information are integrated, developed and explained to our clients. This information is related to the development of real on-road defensive techniques. A number of theoretical and practical exercises have been instituted to assist our clients in becoming peripherally and primarily conscious of their vision capabilities.

The objective of these exercises is to foster in the student an understanding of the limitation of their vehicle and the effects of forces on them and their vehicle when driving. While this knowledge is being taught, vision and haptic skills are concurrently developed and practised. At all times our educators are required to make full use of the many opportunities such as emergency braking and steering incorporated into these activities, to effectively address the developing attitudes and aspirations of our participants. These experiences are designed to create a lasting effect in the minds of our drivers.

Evaluation of 'Roadcraft'

What I would like to achieve now is to have our work at Roadcraft researched and evaluated. A search of old papers from ACRS Journals revealed a draft policy entitled "Draft Policy Statement on Programme Evaluation" dated 23/8/90. There are two basic principles outlined in this policy statement. These are –

- The Principle of cost effectiveness
- The Principle of programme evaluation. The paper states that "It is the policy of the ACRS to support the principle of cost effectiveness and program evaluation in the assessment of all road safety proposals. This brings our request for research and evaluation or assessment of our Roadcraft programs firmly into the purview of ACRS Policy.

Improving Reversing Safety of Commercial Vehicles

By Dr Will Murray,
willmurray@roadrisk.net

Background



Insurance claims data from many companies around the world and research undertaken at the University of Huddersfield in the UK suggests that between a quarter to a third of all

reported freight transport collision accidents arise from vehicles reversing, in some cases many more. Despite this, the vast majority of such accidents go unnoticed at the government and company levels. As a result there is only limited comparative data and, until recently, very few specific reversing-based reduction interventions such as vehicle-mounted safety cameras have been implemented by vehicle operators, driver trainers or policy makers.

Over 20 years ago, in 1982, the Health and Safety Executive (HSE) 'Transport Kills' document highlighted reversing as a manoeuvre responsible for a large proportion of fatal accidents in the UK. More recently, the HSE estimated that nearly 25% of all deaths involving vehicles at work occur while vehicles are reversing. The 25% figure comes from scrutiny of HSE inspectors' accident investigation reports, and includes approximately 10-20 deaths per annum. Vehicle direction is not always recorded, and HSE does not investigate all accidents reported to it – so the figures are possibly an underestimate.

A typical case, which recently went through the courts in the UK, involved a fatal reversing accident at the back door of a retail store. Approximately 38% of the company's vehicle accidents occur when their vehicles are reversing. The average cost of each accident is less than £500, mainly minor damage. Many such accidents never even get into most companies' insurance records, being dealt with as routine vehicle maintenance costs, let alone official UK statistics. For this reason companies and the authorities are often ignorant of the