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A Safe System: Expanding the Reach

“Rural v Urban Crashes”

Author: Graham Smith
Roadcraft, Gympie, Qld
Associate Fellow of ACRS

Chosen themes of this presentation:

- Rural Road Safety
- Low Socioeconomic Status
- Crash Response and Post Crash Care

Keywords:

- ❖ Rural v Urban
- ❖ Speed Differences
- ❖ Privilege or Necessity?
- ❖ Vehicle Age & Maintenance
- ❖ First Aid Improvements

Body of Paper:

We, at Roadcraft, are committed to the belief that prevention is better than cure.

Our mission statement reads:

“Roadcraft’s commitment is to prevent road trauma by providing effective road safety education to road users of all ages”.

We set out to achieve this outcome by combining the concepts of Skill, Knowledge, Attitude and Aspirations, to develop appropriate road use behaviour.

Our presentations incorporate the concepts of:

- An understanding of energy and motion sensitivity.
- Human and Vehicular dynamics and limitations.
- Road Law and Social Interaction.
- The function, control and direction of human vision, relative to the task of road use.
(Human responses have developed over millennia to accommodate maximum running speeds of 25kph not current driving speeds of 110 kph.)
- Driving techniques to establish and maintain adequate time and space to successfully manage potential emergencies.

Perhaps the greatest divide in Australian society and culture is the urban-rural division. For various reasons, this divide reveals itself, not least, in road crash and road trauma occurrences. While statistically more road fatalities occur in our cities and suburbs than in our rural areas; population density and vehicle use in our cities, far outstrips that of our rural districts.

My observations of some of the examples of Rural-Urban differences include:

- Most urban vehicle speed is restricted to 50-80 kph
- A driver's licence can be obtained in our cities and larger regional centres without the applicant ever having exceeded 80 kph. However, rural and regional "P" platers, on attaining their licence are immediately exposed to speeds of 100 to 110 kph. Resulting in the young rural driver having to handle these higher speeds as a matter of course.
- In outer suburban areas, and country towns, as well as in the more isolated rural districts, due to the lack of, (or the complete non-existence of) public transport, young people seek, and in fact require, a driver's licence as soon as possible.
- In our cities, holding a drivers licence can be looked on as a privilege. To take part in the normal activities of country and regional life, it is a necessity.
- In our cities, attention grabbing headlines occur when a young male driver, with a car load of passengers, greatly exceeds the speed limit and crashes with disastrous consequences. Much discussion on the subject of attitude and possibly anti-social behaviour, then ensues.
- While many of these rural roads, which are undivided, are subject to speed limits of 100 kph; they are not constructed to the safety standards of our highways or major urban road networks.
- While traffic density is often low on these secondary roads, a high proportion of the traffic is made up of heavy vehicles. In many cases, meeting a heavy vehicle forces the driver of the smaller vehicle to leave the pavement with at least two wheels.
- There is double the amount of energy in a vehicle travelling at 100 kph than at 75 kph.
- Aus RAP and RACQ claim that 37% of Queensland's national highways fit the category of high risk rating. (Gathered from Press reports)
- In the first few weeks of 2012, Queensland recorded almost one fatality per day. Most of these crashes have occurred on rural, rural residential and peri-urban roads. (Gathered from press reports)

Low Socioeconomic Status:

- Low socioeconomic conditions affect both urban and rural populations. However, my observations in Australia and worldwide conclude that rural dwellers are over-represented in lower socioeconomic categories. This then appears to result in these people driving cheaper, which usually means older cars. Many of these vehicles do not meet the safety standards, nor are they fitted with the safety features of their more modern counterparts. A more intensive, which translates to a more maintenance regime is required, but not always met.
- My, now thirty years of driver education experience and exposure to several thousands of drivers, and their cars, has revealed a higher percentage of poor quality, badly worn and mismatched tyres fitted to the cars of people in this group. Both rural and lower income beginners have limited access to professional Learn-to-Drive services. For these beginners most instruction is provided by parents or friends who may or may not have the required instructional skills or road safety knowledge. This has been reinforced by the current requirements for learner licensing.

- It is well acknowledged that first and foremost, the duty of a Learn-to-Drive instructor is to bring the learner up to licence standard, in order to pass a driving test. This restricts the Instructor and requires them to concentrate on a number of specific concepts, leaving insufficient time for the student to experience and be exposed to a range of important road safety activities and ideas.

Crash Response and Post Crash Care:

This segment has been developed in discussion with the Officer in Charge, Gympie Ambulance station.

- In Queensland all Ambulance Officers are now trained Paramedics.
- When an Ambulance is despatched to a crash scene, it is now also, often attended by a Senior Ambulance Supervisor. This officer's duties are to secure the crash scene, report to base, alert hospitals, call a helicopter if required, and to arrange landing areas etc. This allows the paramedics to give their full attention to the injured.
- Fire and Rescue Officers are trained to the level of Advanced First Aid standard and are supplied with advanced resuscitation and First Aid equipment.
- The concept of First Responders is being developed throughout the State. This system identifies areas which are some distance from an Ambulance station, and trains groups of volunteers to the level of an Advanced First Aid Certificate, as well as in specialist First Responder techniques. These people are now regarded as being more highly trained than an Ambulance Officer of twenty years ago.
- In addition, many employers are now required to provide First Aid training to their employees.
- These initiatives have led to a large section of the population now being trained in First Aid. This in turn has led to much earlier and more effective assistance reaching crash scenes and a resulting reduction in fatalities.
- This combination of First Response initiatives appears to be contributing to a lowering crash fatality rate and, therefore, an increased survival rate of seriously injured people. The escalating numbers of crash survivors with serious or permanent injuries, is an increasing burden on our health system, as well as to our community in general. It is important that our health service providers and disability support systems recognize this trend and plan accordingly. This has yet to be statistically linked.

Discussion:

Speeds in urban areas are lower as a consequence of lower speed limits and vehicular congestion. Travel speed is largely beyond the control of the individual driver. Urban speed limits and average speed travelled is much better matched to the capacity of the road and associated infrastructure.

Rural areas vary from well designed highways (usually at speeds of about 110kph speed limit) to ill-designed and ill-maintained tracks, which are often still subject to 100kph speed limits. The speed of travel on these lesser quality roads is dependent on the skill, attitude and knowledge of the individual driver.

Urban driver licence holding is often referred to as a privilege. Rural and small town dwellers require individual mobility as little or no public transport exists. Young people require a driver's licence as early as possible. This begs the question, is a driver's licence in a rural area, a privilege or a necessity? Driving without a licence appears to be becoming a very common misdemeanour dealt with in rural courts.

A higher proportion of lower socioeconomic families reside in rural areas, as compared with urban communities. This results in the use of older cars, with fewer safety elements fitted, as well as a higher maintenance requirement, which may or may not be met. These older, less well-maintained cars will be expected to travel at a higher average speed than their newer, better maintained city counter parts; and on less well-designed and maintained infrastructure.

The Queensland Ambulance Service now provides more highly trained officers and better equipped vehicles, complete with helicopter back-up. There are also highly trained First Response teams being rolled out across the state to serve in areas some distance from Ambulance Stations. In addition, there is a significant increase in First Aid knowledge throughout society. As a result of these, and other factors, the percentage of motor vehicle fatalities is reducing, and the surviving injured are then placing an increased burden on health services and the general community.

Concluding Comments:

We, at Roadcraft, believe that, as in all things, prevention is better than cure.

With a number of instructors, we have gained over 120 years of combined experience and observation, including that of my own 30 years.

We believe, that a substantial upgrade in education and training is required in preparation for road use from the beginning of school attendance to being aged in our mid-twenties.

This upgrade in education and training should be the result of extensive research and continuous monitoring over a long period. We believe, that much more research is needed into defining the various and overlapping elements of human failure, which lead to motor vehicle crash.

Graham Smith AF. ARCS
Director of Education
Roadcraft Gympie 4570

Email: gralyn@netspace.net.au