

# ROADWISE

*The Journal of the College of Australian Road Safety*



Vol. 1, No. 1, February, 1988

## National Traffic Education Conference

Road trauma continues at epidemic proportions in Australia. The cost to the community of road accidents is estimated to be more than \$3,000 million annually. But fatalities, injuries, suffering and damage and the personal and social effects of these are beyond quantification. Initiatives to arrest this drastic state of affairs are required. Fortunately, an awareness of the problem is increasing. Many different solutions are being formulated in a variety of ways throughout the community. But priorities for measures to counteract road trauma are not clearly defined.

In such a situation, educationalists, engineers, consultants, public servants, researchers, politicians and instructors can work in their own area of interest and not be aware of duplication of effort elsewhere or not have access to helpful information from other sources. It is out of concern for the need for a more co-ordinated approach that the National Traffic Education Conference was held in February 1986. The venue was the Campus Conference Centre, University of New England, Armidale, N.S.W.

The conference attracted delegates from most states and the A.C.T. Represented at the conference were members of the medical profession, police, ambulance, motorists' organisations, educational institutions, government transport, main roads, traffic and road research departments and authorities, driver training schools, research organisations and road safety equipment manufacturers.

The keynote speaker was the Federal Minister for Transport (Mr. Peter Morris). In his address, Mr. Morris drew attention to the magnitude and seriousness of the problem. He urged delegates to come together and develop an agreed stance on "what driver training really means" and threw out the challenge to "plot a common course".

The outcome was a major breakthrough in communication between

varied groups concerned about the problem. Delegates to the conference resolved to aim at closer communication between all groups (particularly between driver training, driver licensing authorities and researchers) and wider dissemination of research information and practical road safety initiatives.

The discussions were published in "The Proceedings of the 1986 National Traffic Education Conference" ISBN 0 9590668 10, Eastaus Management Unit.

Delegates considered the conference so successful that they unanimously supported a resolution that a similar conference be staged in the Australian bicentennial year 1988.

### 2nd National Conference

The 2nd National Traffic Education Conference will be held on February 19-20, 1988 at the Campus Conference Centre, University of New England, Armidale. The objective is to consolidate communication links between persons from diverse backgrounds who have concern about road trauma; to review developments since the 1986 conference; to clarify the functional components of the process (especially traffic education) being developed to control road trauma.

The keynote speaker will be Gordon Trinca O.B.E., M.B.B.S., F.R.A.C.S.,

National Chairman of the Road Trauma Committee of the Royal Australasian College of Surgeons, Melbourne. He is also Director of the international "Road Safety Blueprint for the year 2000 Project". Other leading speakers from various states will participate. There will also be several open forum discussion sessions.

Topics include:- Cost effectiveness and priority of control measures, communication and dissemination of information and educational material, curricula - objectives, implementation of educational programmes, evaluation of educational programmes, protection for non-drivers, bicycle education, heavy vehicle and high speed driving, re-examination of heavy vehicle and high speed driving, re-examination of drivers, random breath testing; role of police in traffic education and control, life support first aid at crashes.

The venue City holds additional interests for visitors to the conference. Armidale is a unique Australian city which has developed as a rural education and cultural centre. The community has given considerable attention to traffic safety over the past 15 years. This is the subject of a special report "A Community Model for Traffic Safety - The Armidale Experience" ISBN 0 9590668 2 9, Eastaus Management Unit, recently commissioned by the Federal Office of Road Safety.

The New South Wales Traffic Education Centre is being developed in Armidale. The purpose of the Centre is to encourage or initiate traffic education courses in other education institutions and schools; provide classroom instruction for visiting groups and conduct off-road training programmes for pedestrians, cyclists, motor cyclists, vehicle drivers and plant operators.



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**Editorial**

## A Service for Closer Communication and Wider Dissemination of Information on Road Safety

The New South Wales Traffic Education Board has realised the importance of communication with the local community and contacts across Australia. One aim has been the sharing of information with other groups involved in road safety. This process began with an invitation issued to National Consultants and Regional Advisers (October 19, 1981).

Also, during its first two years, the Board worked in conjunction with various committees to investigate traffic education curricula. It was a deliberate intention to avoid duplicating previous curriculum development efforts. Educational material was sought from various sources in New South Wales and interstate to use in planning initial courses. The Armidale curriculum was written with advice and support of a National Education Advisory Panel.

Since then, the N.S.W.T.E.B. has become aware of the wide spectrum of interests in road safety as it has carried out other development work. It has been necessary for the Board to have dealings

with many Government Ministers and Departments, including Transport, Education, Health, Lands, Police, Main Roads, Treasury. In researching road safety studies, considering sponsorship approaches and participating in the National Traffic Education Conference, members of the Board have engaged in a considerable variety of contacts.

Two resolutions at the National Traffic Education Conference (February, 1986) also underlined the importance of this matter. The resolutions aimed at closer communication between all groups (particularly driver training, driver licensing authorities and researchers) and wider dissemination of research information and practical road safety initiatives.

These experiences confirm the importance of one of the original aims written into the Constitution of the Board, to promote the formation of a National Association of traffic safety organisations. This is the genesis of the foundation of the College of Australian Road Safety.



# A Road Safety Blueprint For The Year 2000

**In the next 15 years it is estimated that six million people will die in road traffic crashes and 350 million will be injured throughout the world.**

Over the last two decades progress has been made by some motorized countries in reducing road death and injuries. This is due to a number of factors which include crashworthy vehicle design, increased road user crash protection, improved road engineering, effective regulatory processes, expanded educative and training methods and improved medical services.

The lack of widespread application of many of these factors in developing countries is mainly due to limited access to technology, inadequate economic support and a deficient or absent road safety infrastructure.

The lessons learned in motorized countries are transferrable to countries which have not reached a high level of motorization, thereby providing the tools and experiences necessary to reduce the "learning curve" at various stages of motorization.

An eight member task force of international specialists representing medicine, engineering research and public policy development has been formed to address the problem in a global context.

The project titled, "A Road Safety Blueprint for the Year 2000" is being conducted under the aegis of the Royal Australasian College of Surgeons and under the leadership of Melbourne surgeon, Dr. Gordon Trinca. This three year study has received significant support from the Australian Government and the World Health Organisation and has as its main sponsor, Colonial Mutual Life Assurance Society. The project has been recognised as an official Australian 1988 Bicentennial activity.

Key objectives of the task force are to:

- examine emerging trends that may impact road transport in the next two decades

- establish a data base of selected technical resources applicable to the project's scope

- develop strategies that could be applied by countries at various stages in their level of motorization

- assess the current role of appropriate institutions as it applies in both fully and partially motorized countries

- promote acceptance of the essential role institutions have to play in mitigating a major public health problem

- determine new directions and roles for the institutional influences in both public and private sectors

- foster the concept that the development of technological solutions should transcend geographic, cultural, political and institutional barriers.

*(Modified from a statement by the Royal Australasian College of Surgeons, Melbourne.)*

*In 1987 a course entitled "Child Traffic Safety Education" was the first tertiary level course available in Australia.*

*It was offered at the Armidale College of Advanced Education as a professional teaching option in the Bachelor of Education degree.*

*Undergoing practical work at the NSW Traffic Education Centre is Cathy McShane (second from left), who won the Camkin Award for the most outstanding student in the first group to take the course.*





# The Place of Education in Road Safety

Dr. David Saffron, NSW Dept. of Motor Transport

## Perspective

The aim of this paper is to give some impression of the wider area of road safety and some of the roles that school education can play in this context.

A common and convenient means of analysis in road safety is via a nine cell matrix. This matrix results from considering three types of factors which can affect crashes and their outcomes, and three phases of a crash. The three types of factors are:

- human,
- vehicle and equipment, and
- road and traffic environment.

The three phases of the crash are:

- pre-crash,
- in-crash, and
- post-crash.

Examples of entries in the cells of this matrix illustrate the great breadth of traffic safety.

## Short term benefits

Education is often thought of as a pre-crash, human factor, countermeasure. This is true (even though it leaves a lot out). Attempts have been made - successfully and otherwise - to influence the behaviour of school children as pedestrians and pedal cyclists.

Education also has obvious relevance to human factors in the in-crash and post-crash phases, and examples can be given.

Safety of children can be enhanced by attempts to influence guardians and supervisors via school students.

## Medium term benefits

The evaluation of the "slob" drink driving campaign resulted in recommendation that knowledge and attitudes of the target group - young drivers - could be more cost-effectively influenced through school education. Publicity is very expensive; education is not so expensive if it aims to assist teaching rather than intruding. The classroom

situation and the teacher student relationship seemed more suitable for getting across a complex message more convincingly. In this way, attempts can be made to influence various aspects of the road using behaviour of young people in the years after they leave school.

But behind the wheel driver training in high schools has not been shown to be successful. One interpretation of the evidence is that motivation is more important than skill in producing safer driving performance. Important determinants of the influence of motivation are the needs, attitudes and values relating to road use present in society.

## Long term benefits

An integrated programme of road safety education should be applied through a young person's school life, from kindergarten (or even pre-school) onwards. The long term benefits might be much greater than the short and medium term benefits. There is some theory and evidence to support this approach, but expectations of success appear to depend essentially on common sense and hope. Therefore it remains important to try to achieve short and medium term goals.

## Long term and broader

Countermeasures relating to vehicles and equipment and the road and traffic environment may be more effective than those depending on road user behaviour. But these engineering and planning measures depend ultimately on human decisions. Similarly the effectiveness of police enforcement depends on the priorities and decisions of police officers. The behaviour of public officials is influenced by social values, partly because the officials are themselves members of the society, and partly because of public demands arising from these values. These demands will be most effective in promoting safety to the extent that members of the public have relevant knowledge.

School education is intended to be used to influence values and knowledge.

Education itself is an area of importance to road safety for which decisions are made by public officials; so that there is feedback in the system. But it is not a closed system beginning and ending in education. Publicity and education, together can be used to improve road user behaviour and to create a social environment in which other road safety measures can find support and acceptance.

## Conclusion

School education can have an impact in relation to all of the various types of countermeasures (as set out in the nine cell factor by phases matrix). Thus, education is clearly of great importance to the overall road safety effort.

(This paper was presented at the 1986 National Traffic Education Conference.)

## About the Author

Dr David Saffron, who originally trained as an Accountant, holds a M. Eng.Sc. degree in Transport Planning and Traffic Engineering from the University of New South Wales and a Ph.D. in Psychology from Sydney University. From 1979-1985 he worked at the Traffic Accident Research Unit of the Traffic Authority of New South Wales. In 1981-1982 he was one of two specialist advisers to the House of Representatives Standing Committee on Road Safety in its enquiry into driver licensing, education and training. He is interested in all aspects of road safety but particularly in road user behaviour. Since 1985 he has worked in the New South Wales Department of Transport and is currently Executive Assistant, Legislation and Policy Branch of the Department.



# College of Australian Road Safety

Road trauma is a major public health problem in Australia. It involves all sections of our community, particularly those in the first half of life when it is the most common cause of death.

The solution to this dreadful modern epidemic, linked to the desire for good mobility in our modern lifestyle, lies in the use of safe vehicles, a forgiving traffic environment, increasing knowledge and skills in using that environment and changes in community attitudes.

There are many groups, both public and private, at work at all levels of society to curb the road toll. Their initiatives require co-ordination and support.

## Steering Committee Formed

A Steering Committee has been formed and a draft Constitution has been prepared for the formation of the Australian College of Road Safety.

The members of the Steering Committee who support the formation of this organisation are B. H. Connor (N.S.W.), I. M. Johnstone (N.S.W.), G. Maskelyne (Qld.), T. W. Field (N.S.W.), J. McGrath (N.S.W.), C. Nolan (Vic.), C. C. Grigg (N.S.W.).

The College of Australian Road Safety (C.A.R.S.) has been founded to provide a supporting network for everyone trying to make our traffic system safer. This new body will provide information about road safety resources available to its members, advise about successful implementation procedures and campaign for a safer traffic environment.

## Objectives

The objectives of C.A.R.S. are as follows:

1. To foster closer communication, co-operation and support between all groups and individuals working at all levels in road safety and traffic education programmes.

2. To provide a source of information on road safety and traffic education available in Australia and from overseas and to disseminate this information through regular publications and other means.

3. To support community groups working to reduce the road toll.

4. To assess, evaluate and monitor road safety programmes and to promote those that are most effective.

5. To provide a forum for promotion of workable road safety initiatives through appropriate government and private bodies.

6. To support all groups which aim to provide a caring and supportive environment for victims of road trauma.

## Membership

Membership of this organisation is invited. Application may be made by completing and returning the coupon. Membership will be restricted only by the capacity for the concern about road trauma.

The first annual general meeting of the new organisation will be held at Austin College, University of New England, Armidale, NSW, at 5.00 pm on February 19, 1988. This will follow the first day sessions of the Second National Traffic Education Conference.



Austin College, University of New England, Armidale, NSW. Provides facilities for the Campus Conference Centre and is the venue for the second National Traffic Education Conference, to be held on February 19 and 20, 1988.



## Profiling People

### Mr John Fraser, Director of John Fraser Fleet & Driver Consultancy

Throughout Australia there are several specialists in private enterprise, engaged in driver training and consultancy. The scope of the services provided by these people is broader than the specific function of the large number of Driving Schools in most major towns, catering for motorists seeking a driver's licence.

In this profile we look at John Fraser. Since 1971 he has been Director of John Fraser Fleet & Driver Consultancy in Brisbane. This business is engaged by many large companies and organisations in an advisory capacity.

John Fraser brings experience to the business which he has gained from training and participation. He attended a course at St Ives Police Driver Training Centre, Sydney in 1970. In the period 1967-1982 he was a keen motor racing competitor. In 1982 he was Queensland Sports Car Champion and was first (2.5 litre class) in the Australian Sports Car Championship.

He is a member of the Advanced Motorists Chapter and the Institute of Advanced Motorists.

Prior to establishing his own business, John Fraser was Driving School Manager for the Royal Automobile Club of Queensland (RACQ). He developed and taught advanced driver training programmes at selected private and public schools in Queensland.

The John Fraser Fleet & Driver Consultancy provides a range of services related to safety and efficiency of vehicle use. These include efficiency of vehicle fleet operation; fleet driver accident history; community accident patterns; driver training in cars, trucks and heavy equipment; and design of heavy industrial equipment.

Companies which have engaged John Fraser Fleet & Driver Consultancy to conduct training programmes for drivers of their vehicle fleets include B.M.G. Resources, Rothmans, Lifesavers, I.C.I., C.S.R., Esso Australia, Elders/Pastoral and Mobil Oil Australia. In some cases investigation is carried out into accident history with the results being used in subsequent driver training programmes. Advice is also given on overall operating costs and fleet operating efficiency.



In providing consultancy to Mining Companies, the principles employed in advanced driver training were extended to trucks of 200 tonne capacity used for mining operations. Training is given under all aspects of normal and abnormal driving conditions. Major companies such as MIM Newlands, MIM Oaky Creek, Thiess Dampier Mitsui Coal and Utah Development Company have used these training programmes.

The work in the mining industry has also been extended to include occupational health. This involves consulting with Company management and equipment designers on ergonomics. This has resulted in modifications to seating, lighting, rear vision and instrumentation of coal haulers and trucks.

Working in conjunction with Geoff McDonald & Associates, John Fraser Fleet & Driver Consultancy investigated 834 single vehicle accidents. This was part of a study commissioned by the RACQ and the Queensland Road Safety Council to analyse accident patterns and the influence of alcohol in accidents.

John Fraser also applies his expertise in associated fields. Reports of investigations of factors involved in accidents are used as evidence in court cases. He also lectures to Psychology students at the University of Queensland. In the course he deals with the interaction of human-machine-environmental factors in the study of the causes of road crashes.

John Fraser will present a paper entitled "Heavy Vehicle and High Risk Occupational Driving" at the Second National Traffic Education Conference to be held in Armidale, New South Wales on February 19 and 20, 1988.

## Publications

One of the objectives of the publisher and the College of Australian Road Safety is to disseminate information on road safety and traffic education issues. To this end, lists of recent publications and some reviews will be presented in various issues.

Some important books, pamphlets and teaching aids have been produced during the past year. Some of these are listed below.

The publishers would be pleased to receive information about any other recent publications for inclusion in future issues.

*"The Complete Drivers Companion"*, State Government Insurance Commission of South Australia, ISBN 0 7308 0418 6

*"Driving and Roadcraft"*, National Safety Council of Western Australia, ISBN 0 9588182 0 7

*"The Australian Drivers Handbook"*, E. A. Huxtable, Fairfax Library, ISBN 0 949054 09 7, (revised edition), 1987

*"A Community Model For Traffic Safety - The Armidale Experience"*, EastAus Management Unit, (commissioned by Federal Office of Road Safety), ISBN 0 9590668 2 9

*"Language on the Road - Traffic Safety Programme with Classroom Language Activities"*, Jenny Houlihan

*"Student Driver Education - Student Text"*, Queensland Road Safety Council, ISBN 0 909891 02 8

*"Student Driver Education - Teachers Guide"*, Queensland Road Safety Council, ISBN 0 909891 03 6

*"Crash Kit - The Glovebox Guide to Coping with Crashes"*, Redfern Legal Centre Publishing, ISBN 0 9595703 7 3

*"The Road Rules Video"* (a visual presentation of the Motor Traffic Handbook), initiative of the New South Wales Department of Motor Transport and sponsored by N.R.M.A. (available for hire through New South Wales Motor Registry Offices).

*"Out and About... Road Safety for Children"* series, Federal Office of Road Safety, Department of Transport, Canberra.

Staysafe 11 - *"Safety of Two Lane Country Roads"*, Parliament of New South Wales Joint Standing Committee on Road Safety, 1987.

*"Road Safety - A School Community Issue"*, Advisory Committee on Road Safety Education, New South Wales.



# Guidelines for Driver Training

## Highest Priority

1. Safe driving attitudes and responsible road user behaviour should be developed through every use of the road system as passengers, pedestrians, bicyclists and drivers. It is particularly important in children when attitudes are still developing.

2. The ability to recognise potential hazards and take the correct action should be developed when 'carcraft' skills become more automatic.

3. Decision making skills such as speed selection, adjustment of safety margin, trip planning and judgement training should be developed.

## Needs

4. Road laws should be understood in a practical sense and include understanding of the rationale for the law in terms of safety.

5. Knowledge of safety-related mechanical aspects of the vehicle should be developed.

6. Understanding and use of controls, including starting, stopping and steering should be developed.

7. Simple driving skills such as leaving and returning to the kerb, slow moving forward, hill starts, cornering and intersections should be developed.

8. Traffic skills should be developed. These include hills, bends, traffic lights, laned roads, pedestrian crossings, turning at lights and lane changing.

9. The ability to deal with adverse conditions such as night or wet weather should be developed.

10. Open road skills such as understanding the limitations of vehicle performance, cornering, overtaking and speed should be developed.

11. Slow speed manoeuvring skills should be developed.

12. Safe vision habits such as aiming high, viewing the whole scene, keeping the eyes moving and avoidance of blind spots should be developed.

13. Knowledge of crash causes, common situations, and the effects of alcohol, drugs and fatigue should be developed.

A greater emphasis on attitudes, perceptual skills and decision-making will necessarily mean a change to training and licensing practices.

*Federal Office of Road Safety  
December 1986*



Miniature fibre-glass vehicles, known as "Careful Cobber" cars, are used for pre-driver instruction at community based Traffic Education Centres in various Australian states. Here, the Director of the Traffic Authority of NSW, Mr Harry Camkin, is observing the training of young people at the NSW Traffic Education Centre in Armidale.

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