

## **STAYSAFE Committee**

The STAYSAFE Committee is the road safety committee of New South Wales Parliament. The Committee has existed since 1982, and has handed down more than 60 reports.

The general terms of reference of the STAYSAFE Committee are as follows:

- (1) As an ongoing task, the Committee is to-
  - (a) monitor, investigate and report on the road safety situation in New South Wales; and
  - (b) review and report on counter measures aimed at reducing deaths, injuries, and the social and economic costs to the community arising from road accidents.

Without restricting the generality of the foregoing, the following are to be given urgent consideration -

- (i) Countermeasures aimed at traffic accidents associated with alcohol and other drugs.
- (ii) Traffic law enforcement measures and their effectiveness.
- (iii) A review of human factors affecting traffic accidents, especially those relating to driver and rider licensing requirements and standards.
- (iv) The social and economic impact of deaths and serious debilitating injuries resulting from traffic accidents.
- (v) Heavy vehicle safety.

The primary functions of the STAYSAFE Committee are often summarised in the following way:

- To monitor, investigate, review and report on road safety matters, and
- To review and report on countermeasures aimed at reducing death and injury through road crashes and reducing the social and economic costs to the community of road crashes.

STAYSAFE's current inquiries include:

- speed and motor vehicles
- safety of railway level crossings
- car surfing
- annual reviews of road safety

## **STAYSAFE's annual reviews of road safety**

STAYSAFE's annual review process, which provides an assessment of the road safety situation in New South Wales on a calendar year basis. Six annual reviews have been conducted by STAYSAFE examining the years 1994-1999 inclusive, with the seventh review to examine the 2000 road safety situations underway. In recent years, unlike earlier experiences, the process of reviewing the road safety situation in New South Wales has become efficient and informative. It is now acknowledged

by government agencies and by road safety workers generally that STAYSAFE's annual reviews of road safety serve a fundamental and valuable role in documenting the depth and diversity of government action to address the ongoing problem of road trauma.

## **Speeding**

The traditional approaches to dealing with speeding have involved:

- Public education (school-based, advertising)
- Police enforcement (e.g. speed radar, LIDAR, fixed speed cameras, point-to-point systems)
- Road environment measures (e.g., traffic calming measures such as speed humps, chicanes, perceptual countermeasures involving manipulation of road and roadside features such as road markings, gateway treatments, etc.)

There has been little consistent dealing with vehicle-based measures to better monitor, manage and control vehicle speeds.

## **STAYSAFE inquiry into speed and motor vehicles**

The STAYSAFE Committee is to conduct an inquiry into the potential for motor vehicle technologies to influence or control driving speed in light vehicles, heavy vehicles and motorcycles. The inquiry will review:

- established, emerging and future vehicle-based technologies that influence driving speed
- the short term and long term possibilities for improved vehicle-based speed management and control
- road infrastructure, digital mapping, management monitoring systems and vehicle requirements associated with technologies for improved speed management and control
- the potential role of the Australian New Car Assessment Program (ANCAP) and other road safety-based rating and assessment systems to influence the development and marketing of vehicle-based technologies which can influence driving speed
- incentives that may influence the decisions of purchasers of motor vehicles to buy motor vehicles which use technologies for improved speed management and control
- the social and economic benefits and costs to the community likely to be connected with the adoption of vehicle-based technologies for speed management and control
- the capacity for New South Wales (within the Australian federal system) to influence and effect change in national motor vehicle standards
- results of Australian and international trials of speed control systems
- and any other related matters

The inquiry will include review of the following speed management and control systems that relate to vehicle design:

- Intelligent Speed Adaptation (ISA) where the system acquires information about local speed limits and encourages driver compliance
- Top speed limiting where the vehicle is unable to exceed realistic top speeds for extended periods
- Cruise control and top-speed limited cruise control
- Speed alarms that are set by the driver
- On-board monitoring of vehicle speeds during entire journeys
- On-board monitoring of vehicle speed just prior to an incident such as a severe accident
- Speedometer scales and ergonomics

The inquiry will also examine and review the role of systems that rely on extensive external surveillance such as Safe-T-Cam or speed cameras.

Further issues already arising from the inquiry include:

- Depiction of speed and power in the marketing of motor vehicles
- Distraction of drivers associated with new technologies
- Should young people be restricted from driving high performance vehicles?

## **Telematics**

Over the last few years, there has been a heavy emphasis on speed enforcement, and on lowering speed limits, but it is time to look at the role of vehicle technology itself in allowing for the better monitoring, management and control of speed.

When you look under the bonnet of car today, it's a complex mix of electronics and mechanics. And it is not just the engine that's been changed by electronics, it's the power train, the braking system, all sorts of systems in cars these days. As we see this technology shift, so we must adapt our approach to government policy and regulation too.

There are three principal players in the area of speed control and motor vehicle design and engineering – the automotive industry, the government, and then there are the researchers.

A core issue is whether the deployment of new motor vehicle technologies should be required by regulatory measures, or be market driven: Can past experience guide us (e.g., the introduction of seat belts, ABS, air bags)?

Another core issue is the nature and implications of the move from, or the interplay between, mechanical engineering and electronics: What kinds of interactive vehicle systems are emerging as automotive technologies shift from analogue to digital (brakes interacting with steering, brakes interacting with power train, vehicle control systems interacting with road infrastructure, etc.)? And what is the form (or forms) of the interface between a driver and the vehicle, or the vehicle and the roadway?

## **Road trauma reduction in New South Wales**

When the performance of the New South Wales road transport system is examined across a broad scale, for example, from 1950 to the present, there has been a

dramatic reversal in road trauma since the late 1970's. The current estimate by the Roads and Traffic Authority is for about 550 road deaths in New South Wales in 2003. This is a more than a halving from the 1,303 people killed in road crashes in 1980.

Indeed, the current level of road trauma in New South Wales represents a significant improvement just over the last decade. Compared against the road toll in 1990, where 797 people died on New South Wales roads, the Roads and Traffic Authority's estimate is a reduction by one third.

The scale of these reductions in road trauma in New South Wales compare favourably with other Australian States, and most westernised countries. Justifiably, road safety workers in New South Wales during the 1970's and 1980's have a reason to be proud of their successes in reducing road trauma.

Unfortunately, there are also less encouraging signs. If we take a shorter term view, then the level of road trauma in New South Wales remains more-or-less constant in comparison to the immediately preceding years. For example, if we examine the five year period 1996-2003, road trauma outcomes have stabilised at around an average of 560-580 deaths:

## **Road safety strategic planning in New South Wales**

The first decade-long road safety strategy for New South Wales – Road Safety 2000 – was completed three years ago.

A new road safety plan, the Road Safety 2010 strategy, was released in late 1999. A series of specific actions plans developed under this strategy are being implemented currently.

Issues associated with road safety planning strategies include:

- is a 10-year period a suitable time frame?
- strategic plans as 'living documents', that is, should the strategic plan be revised and upgraded periodically (e.g., every year, or every three years) to reflect implementation of policies and programs, and the identification of new problems, new technologies?
- given the investment in producing road safety strategic plans, why is there a reluctance to invest in reviewing the effectiveness of road safety strategic plans?
- the setting of road trauma reduction targets remains problematic. The targets established for the Road Safety 2000 strategic plan were achieved, at least momentarily, by 1993; a revised target for the Road Safety 2000 strategic plan remains apparently unattainable, even three years after the completion of the plan.

## **Road trauma reduction targets**

The National Road Safety Strategy 2001-2010 provides for a target reduction of:

“... the number of road fatalities per 100,000 population by 40%, from 9.3 in 1999 to no more than 5.6 in 2010.”

This national target of a 40% reduction in road trauma also appears to be the target set for New South Wales in the Road Safety 2010 strategy, although the Minister for Roads, the Hon. Carl Scully MP, refers to a halving of the road toll in his foreword to the New South Wales strategy.

The national and New South Wales strategies, and the targets set as part of the strategies, may not relate well to community expectations. Community opinion of road injuries and deaths does not focus on technically accurate terms (or benchmark terms) such as deaths per 100,000 population, deaths per 10,000 vehicles registered, or deaths per 100 million vehicle/kilometres driven. Instead, the general public and the media have been educated, through long exposure to the debate over road safety, to think of road trauma as being the road toll—how many people die each year. For example, as the Road Safety 2000 target for New South Wales is less than 500 deaths, a further reduction of 40% by 2010 would probably be expected to be less than 300 road deaths (and a halving of the road toll by 2010 would probably be expected to be less than 250 road deaths). In other words, what the community would likely understand to be the target in 2010 would be, at a minimum, a road toll of less than 300 deaths.

But this expectation of the New South Wales road toll is at odds with the ‘technically accurate’ 2010 targets in both the national and New South Wales road safety strategies. The New South Wales targets for 2010 – that is, the expected road toll in New South Wales – is, in fact, a toll of more than 400 deaths, and probably closer to 450 deaths. This variance occurs because the national and New South Wales targets are specified in terms of a ratio: road deaths per 100,000 population. The target reductions are, of course, dependent on the rate of population growth over the next decade.

Calculations based on estimates for population growth in New South Wales over the 2000-2010 period, which range from a minimal 7% increase against the 2000 population, through to a 12-15% increase in population, yield a projected target road toll of a toll of more than 400 deaths, and probably closer to 450 deaths.

Expressed in the bald terms of the road toll—the way the general community thinks about road trauma—the national and New South Wales targets for 2010 begin to look a little shaky indeed. Given the gains in road toll reduction since the 1980’s (a 55% reduction in people killed on the roads), the community will expect that much, much more will be done and achieved in reducing the road toll.

This briefing note was prepared by Ian Faulks, Manager, STAYSAFE Committee.