

Contributed Articles

Milestones in Motorcycle Safety - Australia 1976 - 2009

by Ray Newland - Australian Professional Driver Consultants

This article highlights the author's view of some of the major events that shaped motorcycle safety in Australia from the mid 1970's to the present. Prior to 1980 little had been done for motorcycle safety in Australia. Compulsory wearing of safety helmets was introduced in 1967 and 250-260cc engine restrictions in 1979. Motorcycle licence tests consisted of little more than 4 motorcycle questions added to the car knowledge test and perhaps a brief ride watched by the local police officer. In the late 1970s the concept of rider training was born and gradually introduced over the next decade. Rider training initiated government action on motorcycle safety and became a significant milestone for Australian motorcyclists.



Education campaigns, research, legislation, national conferences, government motorcycle committee's and Learner Approved Motorcycle Schemes were all largely connected to the establishment of rider training during this time.

Introduction of Training

Background

The first vision of government backed rider training originated in Victoria in 1976 when the President of the Motorcycle Safety Foundation USA (MSF) met with road safety experts and educators to promote the concept that training could translate to safer riders on the road. While there was no evidence of the effectiveness of rider training, the government convened a committee of riders, industry, Police and road safety officials in 1979 to consider how training could be implemented and this led to the development and trialling of:

- rider training at learner and licence stages
- riding skills tests for a learner permit and licence
- motorcycle knowledge test based on a riders handbook.

In addition the Motorcycle Operator Skills Test (MOST II) was evaluated as the possible skill test for a Victorian motorcycle licence.

Design of Training and Testing

In 1981 Victoria contracted Californian Jack Ford to develop Victoria's training and testing. Ford was project leader of the "Improved Motorcyclist Licensing and Testing Project". The 1980 report of this project showed an accident reduction of up to 21%.

Two levels of training and testing were developed for Victoria.

- Level I training - nine hours training, including the knowledge and learner skills test
- Level 2 training - six hours training, including the licence skill test MOST II.

Initial Introduction

Tasmania was interested in the training concept and Victoria shared the curriculum with its southern neighbour. The Government of Tasmania adopted this curriculum making the training mandatory for learner permit applicants in 1982 and thus became the first State to introduce government backed training in Australia. Victoria followed in 1983 when it introduced voluntary training with compulsory tests. For the next three years Tasmania and Victoria were the only States/Territories with government controlled training.

Introduction in Other States / Territories

The two levels of training in Victoria were voluntary and included the compulsory tests to make the training more attractive. Tasmania introduced the same levels of training but made these mandatory. Rider competence for a permit or licence was assessed during the training.

South Australia commenced its mandatory RiderSafe training in 1987. RiderSafe training also assessed rider competence for the issue of a learner's permit or licence. The Northern Territory's voluntary training Motorcyclist Education Training and Licensing (METAL) was also established around this time and assessed competence for a learner's permit and licence for riders choosing the training.

New South Wales began development of its mandatory training in the late 1980s at key Sydney locations and progressively introduced it across the State through the early 1990s. The training was "competency based training" designed to progressively assess rider competence throughout the course for issue of a learner's permit or licence.

The Australian Capital Territory followed the NSW model introducing mandatory rider training for learner permit applicants but voluntary training at the licence level in the late 1980s.

More than a decade later, in 2001, Queensland introduced its voluntary Q-RIDE training in major population areas. Q-RIDE is competency based, operating as one course of training taking riders from novice to licence level. Riders must obtain a learner's permit before attending the Q-RIDE training and successful riders receive a certificate of competency recognised by the licensing authority for issue of a licence.

Western Australia is currently the only State without official government training. However, this is expected to change soon following a series of key motorcycle safety forums in WA during 2009.

Interesting to note that Victoria, Northern Territory and Queensland implemented voluntary training while Tasmania, South Australia and New South Wales introduced mandatory training. The Australian Capital Territory decided on mandatory training for learners but voluntary training for licence level.

There is some debate on the merits of mandatory versus voluntary training. As noted by Haworth and Mulvihill in 2005 [1], in terms of best practice in training, compulsory training appears better than voluntary, possibly because of reductions in exposure rather than risk reduction.

Other differences exist between the various training approaches in relation to duration and content of courses and in particular whether or not the training includes an on-road ride. It would appear logical that if the training is to assess the rider's competence for licensed riding on the road, then an on-road ride should form part of the training.

New South Wales and Tasmania currently have on-road riding assessed by set criteria as part of the training. To ensure on-road competence and national consistency governments may wish to consider revising their curricula to include on-road riding in compulsory training.

Research

Undoubtedly the most significant research that influenced the development of the training was Hurt et al. (1981) commonly known as the Hurt Report [2]. The study by Anderson et al. (1980) was the major influence in the design of the licence tests [3]. Significant local studies, Haworth et al (1997) and Haworth and Mulvihill (2005) provide a valuable resource for refining the future direction of training and licensing in Australia [4, 1].

National Conferences

Four National Motorcycle Conferences were held between 1980 and 1992 mainly focusing on progress with rider training. In 1999, a Conference on Hazard Perception was held in Melbourne at which international and local experts in hazard perception successfully raised the importance of this skill for

motorcyclists. Attempts to develop methods for training and testing of hazard perception during the last decade have not met with great success. This remains an area of challenge.

Each year, particularly since 2003, an increasing number of papers dealing with motorcycle safety issues, has been presented at the Road Safety Research, Policing and Education Conference signifying a resurgence of research in this area.

In 2008 the very successful Motorcycle and Scooter Safety Summit was held in Canberra. Devised by members of the Motorcycle Safety Consultative Committee, the summit brought together international experts, road safety researchers, industry leaders and riders from all States and Territories belonging to the peak body, the Australian Motorcycle Council. Key issues from the agenda and recommendations from the workshop sessions align with current international issues and recommendations for improving motorcycle safety.

Key Committees

Motorcycle Safety Consultative Committee (MSCC)

Established in 1989 by the Federal government the MSCC currently consists of seven rider group representatives and one representative of the national industry. Key achievements of the MSCC include the Ride On safety video (1999), the staging of the 2008 Motorcycle and Scooter Safety Summit and overseeing the development of the recently launched Good Gear Guide [5].

Victorian Motorcycle Advisory Council (VMAC)

Arguably the premier motorcycle related committee in Australia, VMAC is an advisory council providing expert advice on motorcycle issues directly to the Minister through an independent Chair. Since 2002, when the Victorian Government imposed a \$50 levy on registered motorcycles to fund motorcycle safety initiatives, the role of the Council has become critical to determining the merits of levy project proposals.

South Australia's Motorcycle Task Force and the Motorcycle Safety Advisory Group (MSAG) in Queensland also play crucial roles in the development of key safety initiatives in these States. Motorcycle safety advisory committees in NSW and Tasmania are currently non-operational.

Legislation

Engine Capacity Restriction - 250/260cc

Introduced in 1979, this legislation for learner and first year riders continued in all States (except the ACT where it was never passed) for more than twenty years even though there was insufficient evidence to support engine capacity restrictions. This was an example of static legislation unsupported by evidence and unable to keep pace with dynamic engine development.

The legislation survived until 2002 when NSW lifted the capacity restriction to 660cc as part of its LAMS trial. As LAMS is introduced in other states the 250/260cc restriction is being replaced with 660cc. There is also no evidence to support the 660cc capacity restriction as a safety measure.

LAMS (Learner Approved Motorcycle Scheme)

The concept of a LAMS based on power to weight ratio of 150kW/tonne was proposed by the industry in 1992 at a licensing workshop in Victoria. The RTA introduced the P/W ratio in conjunction with its current 250cc restriction in 1993. Two years later the ACT introduced P/W ratio without a 250cc restriction but it was not introduced elsewhere until after the RTA raised its engine restriction to 660cc in 2002 for a two year trial period.

By the end of 2006, South Australia and Tasmania had introduced the NSW LAMS model of 150kW/tonne with 660cc engine restriction. Victoria and Northern Territory introduced the same LAMS in 2008 and Queensland followed in 2009.

Except for Western Australia the wide adoption of the 150kW/tonne with the 660cc engine restriction gives hope that we may soon see national uniformity achieved with the LAMS.

Australian Design Rule 19/01

In 1992 the Federal government introduced a "hardwiring" requirement (headlight on) to comply with ADR 19/01. While not opposed to the principle of 'lights on', rider groups strongly opposed the "hardwiring". Amongst their objections was the concern that if a motorcycle appeared as a silhouette against the setting sun, the glare of their headlight may render the motorcycle totally invisible to car drivers. The best safety measure here would be "headlight off" but with hardwiring this is impossible.

Riders continued lobbying the Federal Shadow Minister for transport and with the change of government in 1994 the new Minister found insufficient evidence to support hardwired headlights for motorcycles and repealed ADR 19/01 in November 1996. This was a positive outcome for Australian riders and a reminder for government of the need for legislation to be evidence based; however nearly all motorcycles and scooters imported today have hardwired headlights.

Victorian Safety Levy

This controversial issue was introduced without consultation in 2002 and has been the subject of rider outrage for the past seven years. It has raised around \$22m and funded a range of motorcycle safety projects including the Motorcycle Blackspot Program of road improvements to particular sites resulting in a 24% reduction in crashes at the sites.

Other governments showed interest in a safety levy, however when Tasmania attempted to introduce legislation it was defeated in the Upper House following persistent lobbying by riders from the Tasmania Motorcycle Council.

Strategic Plans

'Positioned for Safety' was developed in 2002 by the Motorcycle Council of NSW as a rider initiated strategic plan for motorcycle safety [6]. This was because at the time, governments were not recognising motorcyclists as a separate group of vulnerable road users within their overall road safety planning.

Following 'Positioned for Safety 2002' and the first Victorian strategy 2002-2007 [7], a number of States developed specific strategies for motorcycle safety. These included Tasmania's strategy 2005 [8], South Australia's strategy 2005-2007 [9] and Queensland's strategy 2009-2012 [10], all of which point to a renewed government concern for rider safety.

A second edition, 'Positioned for Safety 2010', was released in 2007 after workshops with key stakeholders to review and improve the strategic plan [11]. 'Positioned for Safety 2010' is an excellent example of the riding community working for the safety of its constituents.

In August 2009 Victoria released its 'Road Safety and Transport Strategic Plan 2009-2013' [12]. This plan, as a national first, recognises motorcycling as a legitimate form of transport. The Victorian Government is to be applauded for taking this step.

Education

In 1989 the Federal Government produced a series of "Look Bike" billboards showing a motorcyclist in the rear view mirror of a car to increase driver awareness of motorcycles.

The 'Ride On' video produced by ATSB in 1999 is still widely accepted by riders as an informative training aid showing excellent riding tips needed for safe riding. Riders and the industry were instrumental in its production.

In 2008 the Roads and Traffic Authority of NSW produced a series of superb posters on how to ride curves; this appealed to riders in communicating the key message without alienating them.

The Good Gear Guide developed by Liz de Rome was recently launched by the Federal Minister for Transport [5]. This received much acclaim from Federal MPs and was recorded in Hansard following the launch. It provides excellent advice for riders on the identification and selection of good quality personal protective equipment (PPE).

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Motorcycle Safety in Australia – Consulting with Riders and Jurisdictions Working Together

By Shaun Lennard, Chairman, Australian Motorcycle Council

I congratulate the College for inviting contributions for this edition on the subject of motorcycle safety – I look forward to reading the thoughts of others on this topical issue.

When referring to “motorcycles” in Australia, we adopt the definition used by the International Transport Forum, that is, we’re talking about motorcycles, scooters, trikes, motorcycles with sidecars, and even quad bikes. For most common usage, “motorcycle” means “motorcycles and scooters”.

The College kindly published my article *Motorcycles and Road Safety in Australia for the Next Decade* in the August 2009 issue, so I won't repeat myself here, other than refocusing on a couple of points in particular.

In this article I'll cover two key themes – consulting with riders and jurisdictions working together.

Consulting with Riders

The international *Workshop on Motorcycling Safety*, hosted by the Organisation for Economic Cooperation and Development (OECD)'s International Transport Forum and held in Lillehammer, Norway, in June 2008 (“the Lillehammer workshop”), identified three general principles and 13 practical measures as priority measures for addressing motorcycle safety across the OECD. These were also ranked in order of importance amassing the individual views of each participant.

The first – that is, the highest of all priorities identified at the workshop – was listed with the heading “Cooperation between the various stakeholders” and stated:

“Improving safety for motorcyclists implies to set up a continuing dialogue and cooperation between the various stakeholders, including the motorcyclists themselves, policy makers, researchers and motorcycle manufacturers.”

It's important to note here that only around two thirds of the almost 90 participants were not motorcycle rider or industry representatives, that is, it was a group mostly made up of government representatives, policy makers, researchers, insurance

industry representatives and the like who agreed on this recommended way forward.

A common theme between virtually all participants at the Lillehammer workshop was that it was time to end the “blame-game and finger-pointing” and instead work cooperatively to improve motorcycle safety. Rather than a focus on motorcycle crash statistics, once the issues had been quantified, the focus of the workshop then turned to developing practical solutions. This needs to be the approach we take across Australia too, if we're to see any significant improvements to the current crash rates.

All reports from the Lillehammer workshop can be found at: <http://www.internationaltransportforum.org/jtrc/safety/Lillehammer2008/lillehammer08.html>

In Australia, fortunately we already have the right approach at the Federal level with the Motorcycle Safety Consultative Committee (MSCC). The largest rider groups in the country are represented on the MSCC, along with the Federal Chamber of Automotive Industries. The MSCC convened Australia's first Motorcycle and Scooter Safety Summit in Canberra in April 2008, attended by over 100 invited participants including many members of the College.

Members of the MSCC are currently working on progressing the seven key recommendations from the Canberra workshop. I recommend anyone with a serious interest in motorcycle safety in Australia to read this report at: http://www.infrastructure.gov.au/roads/safety/publications/2009/msss_report.aspx

The Australian Motorcycle Council (AMC) has amongst its members the peak rider group in each of the States and Territories. How each of these organisations interacts with government and other key stakeholders varies across the jurisdictions. There are a number of different consultative and advisory groups in place across the country.