Submission No 41

INQUIRY INTO VULNERABLE ROAD USERS

Organisation: Motorcycle Council of NSW

Name: Mr Rob Colligan

Position: Chairman

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Date Received: 6/08/2010

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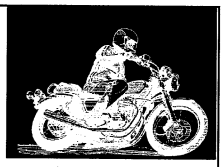
MOTORCYCLE COUNCIL OF NEW SOUTH WALES INCORPORATED



Riders United

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5 August 2010

Staysafe (Joint Standing Committee on Road Safety)
Parliament House
Macquarie St
Sydney NSW 2000

Dear Sirs,

Re: Inquiry Submission

Please find enclosed, our Submission to the Vulnerable Road User Inquiry.

Also enclosed are copies of "Positioned for Safety 2010" and "Motorcycle safety in NSW, 2004-2008 – Some Facts" for reference by the Committee.

Yours faithfully,

Rob Colligan
Chairman
Motorcycle Council of NSW

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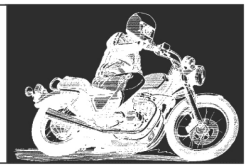
Vulnerable Road Users (Inquiry)

Submission
with particular reference to
Motorcyclists

5 August 2010

MOTORCYCLE COUNCIL
OF NEW SOUTH WALES
INCORPORATED



To
Staysafe
Joint Standing Committee on Road Safety,
Parliament House,
Macquarie Street, Sydney

Motorcycle Council of NSW
15 Huddleston Street Colyton, NSW

Contents

Scope of Comments

Inquiry Terms of Reference

That the Committee inquire into and report on vulnerable road users, specifically motorcycle and bicycle safety, with particular reference to:

a) patterns of motorcycle and bicycle usage in New South Wales;
b) short and long term trends in motorcycle and bicycle injuries and fatalities across a range of settings, including on-road and off-road uses;
c) underlying factors in motorcycle and bicycle injuries and fatalities;
d) current measures and future strategies to address motorcycle and bicycle safety, including education, training and assessment programs;
e) the integration of motorcyclists and bicyclists in the planning and management of the road system in NSW;
f) motorcycle and bicycle safety issues and strategies in other jurisdictions; and
g) any other related matters.

Introduction

About the MCC of NSW

The Motorcycle Council of NSW Inc. (MCC of NSW) is an internationally recognised umbrella group for motorcycle clubs, associations and ride groups, in the state of New South Wales, Commonwealth of Australia.

Established in 1982, the MCC of NSW is the peak body for motorcycle clubs in this state. It represents over 41 clubs, with more than 36,000 riders.

Responsibility in NSW

The NSW Department of Planning has responsibility for Strategy and Infrastructure planning

Transport NSW is the lead public transport agency of the NSW Government, with primary responsibility for transport policy, planning and coordination functions as well as oversight of infrastructure delivery and asset management.

The Roads and Traffic Authority (RTA) has responsibility in NSW for "Improving road safety, testing and licensing drivers, registering and inspecting vehicles, managing the road network".[1]

Motorcycles receive scant mention in Transport Planning, Transport Policy, Roads Policy or Roads Management. Motorcycles are currently a poor fit in the RTA's classification of vehicles. Whilst classified as "light vehicles", motorcycles are not "small cars", but are single-track vehicles with distinctly differing dynamics and specific engineering requirements in certain circumstances.

Motorcycles appear to come to the attention of authorities simply because of casualties. The inability to integrate motorcycle specific issues into roads management allows continuance of the word "problem" to be used in association with motorcycles. As a result, the issue of motorcycle safety is largely handed over to Police as an enforcement issue alone. Parking schemes and tolls are other examples where motorcycles are overlooked in planning and policy. Similarly the lack of inclusion of motorcycles in engineering and maintenance practices is the result of their poor of integration.

In order to improve motorcycle safety in NSW, an outstanding need is to provide independent, sound and relevant motorcycle policy and advice to the Minister for Roads. Administrative practice and spending allocations need to align with legislative requirements of the RTA.

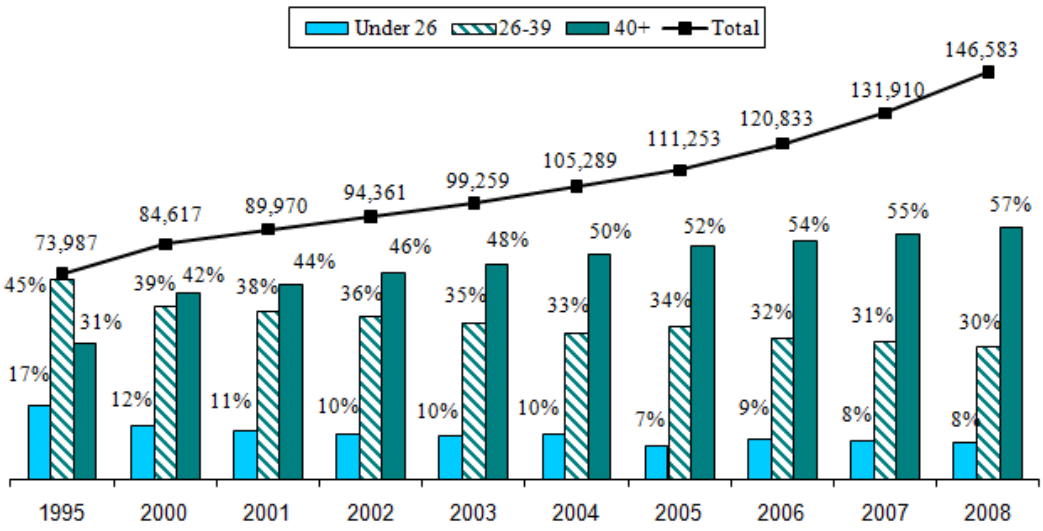
[1] http://www.rta.nsw.gov.au/aboutus/

Patterns of motorcycle usage[2]

The number of registered motorcycles in NSW has increased by 39% in just 5 years from over 105,000 in 2004 to nearly 147,000 in June 2008, see figure 1. Much of this increase is from motorcycles owned by riders over 40. Riders aged 40 plus now represent 57% of all registered owners.

The 2009 Annual Report from the RTA shows 162,076 registered motorcycles. Growth continues.

Figure 1. Age of registered owners of motorcycles in NSW, 1995-2008



It has been found that the most appropriate measure of on-road motorcycle usage is "Owners of registered motorcycles" as only about 50% of all motorcycles sold are registered. Many motorcycles sold are not suitable for registration or the owner chooses not to register a compliant vehicle but use it solely for off road riding.

It is estimated that there are about as many unregistered motorcycles in NSW used solely for off road riding as there are registered motorcycles.

The average age of the owner of a registered motorcycle is 43 years.

There has been a rapid increase in sales of scooters. The pattern of usage of scooters differs from that of motorcycles as they are used mainly for inner city commuting and general transport.

Learner riders are, on average, much older than learner drivers. The average age of a newly licensed rider is 33 years, compared to 18 for a newly licensed driver.

[2] Much of this information is from "Motorcycle safety in NSW, 2004 – 2008 – Some facts" http://roadsafety.mccofnsw.org.au/a/38.html copy attached

Trends in motorcycle fatalities and injuries

In NSW from 2004 to June 2008, the number of the number of fatalities plateaued and the number of motorcycle crashes increased by 17%, (see Table 1).

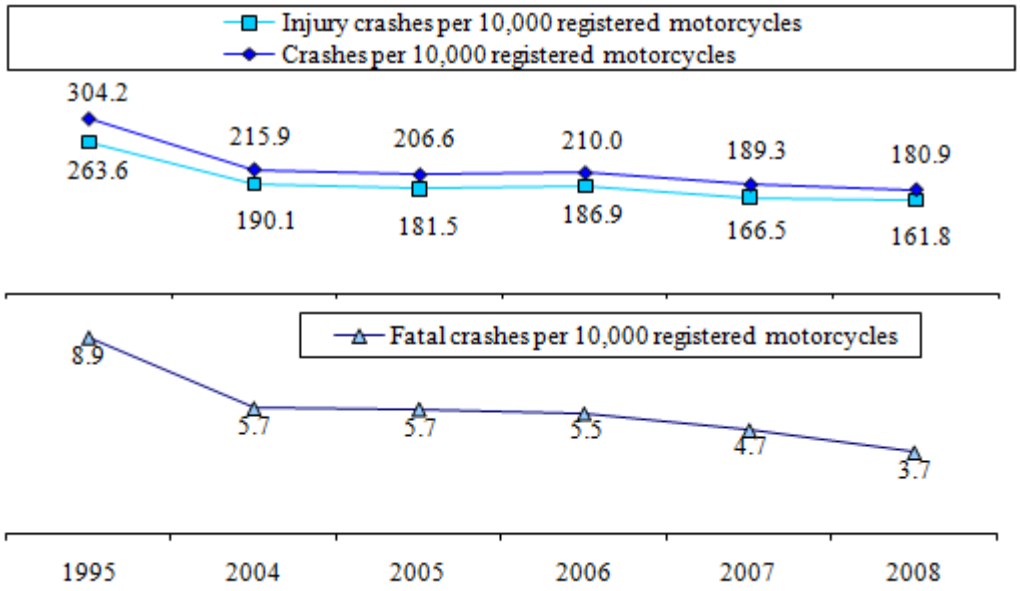
Table 1. Number of crashes in NSW, 2004-2008

Severity of crash	2004	2005	2006	2007	2008	2004/2008
Fatal	60	63	66	62	54	-10%
Injury	2002	2019	2258	2196	2372	+18%
Non-casualty (tow away)	211	216	214	239	225	+7%
Total	2273	2298	2538	2497	2651	+17%

This does not mean that motorcycling is becoming more dangerous, but is a reflection of the increasing number of motorcyclists on the roads, the crash rate per 10,000 registered vehicles has decreased substantially. While, this is encouraging, more needs to be done to make motorcycling safer for the increasing proportion of road users who choose this type of transport.

Figure 2 illustrates the rate per 10,000 registered motorcycles for fatal, injury and all crashes over the past five years and compares this to the rates in 1995.

Figure 2. Number of crashes per 10,000 registered motorcycles in NSW, 1995/2004-08



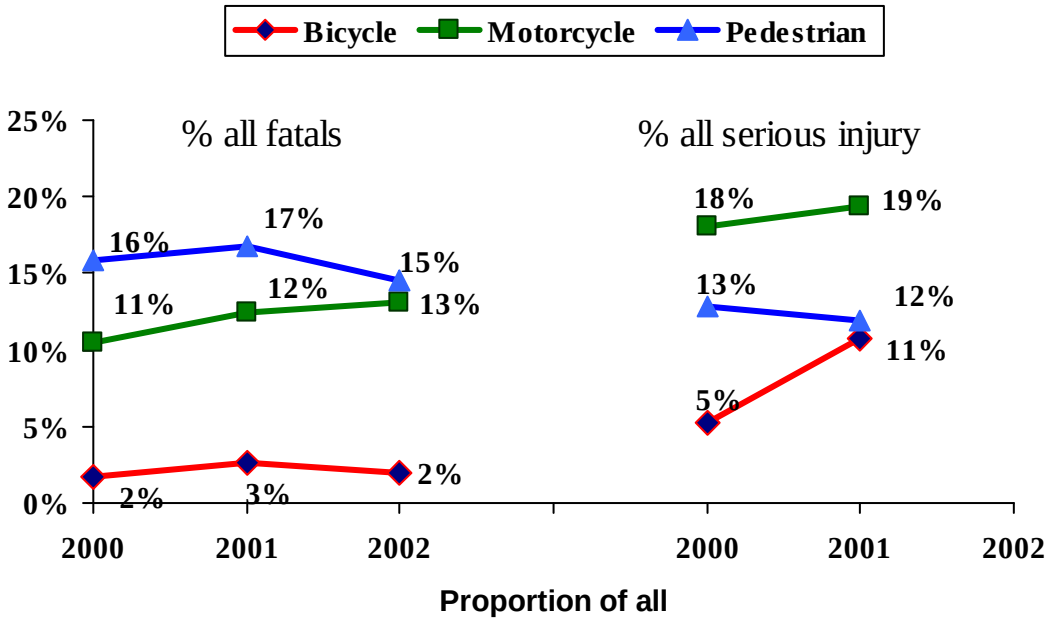
The size of the fleet in NSW of unregistered, unregistrable motorcycles and childrens mini-bikes present a separate set of safety problems that confound available data. Unregistered and unlicensed riders contribute nearly one third of NSW motorcycle fatalities. With steadily decreasing access to suitable riding areas, many off-road motorcycles and mini-bikes are being ridden on a “road related area”.

Around half of all motorcycle injuries resulting in hospitalisation arise from off-road riding activities, including on-farm and recreational riding.

Please refer to Tables 1.1, 3.6 & 3.7 of *Serious injury due to land transport accidents*, Berry, J., Harrison, J. ATSB & AIHW Australia, 2003–04.[3] Similar figures are not available for NSW alone.

The following table is extracted from *Plotting Progress for Road Safety Policy Development*, Ann Williamson, NSW Injury Risk Management Research Centre University of New South Wales, in which she proposes Public Health approaches to injury indicators[4].

Figure 3. Relative proportion of bicyclists, motorcyclists and pedestrians in fatal and serious injury data in Australia



It is worth noting that the expenditure in NSW on each of this group of road users is in stark contrast to injury rates, in that the most injured group receives the least amount of funding

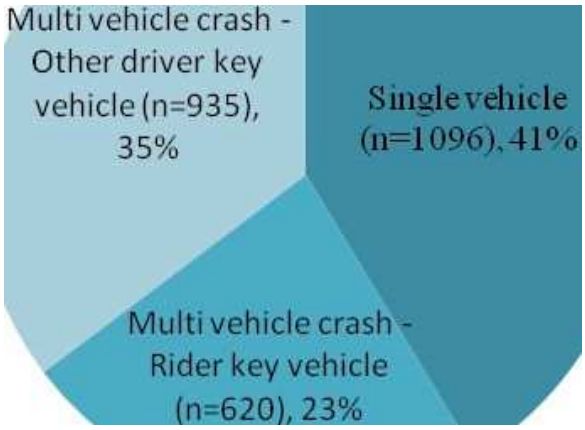
[3] Australian Institute of Health and Welfare: Jesia G Berry, & James E Harrison 2007. *Serious injury due to land transport accidents*, Australia, 2003–04. AIHW cat. no. INJCAT 107. Canberra: AIHW & ATSB.

[4] *Plotting Progress for Road Safety Policy Development*, Williamson, A., 2004, NSW Injury Risk Management Research Centre University of New South Wales, ACRS Journal.

Underlying factors in injuries and fatalities

The characteristics and causes of motorcycle crashes can be best understood by distinguishing between three different types of crash: multi-vehicle collisions due to the rider's action (23.4%), multi-vehicle collisions due to the other driver (35.3%); and single vehicle crashes (41.3%).

Figure 4. Types of crashes by key vehicle in NSW, 2008



Single vehicle crashes account for over two fifths (43%) of all motorcycle fatalities. Single vehicle crashes are almost equally likely to occur on curves as on straight sections of road (49% vs. 51%), but most fatal single vehicle crashes (75%) were on curves.

Excessive speed for the conditions has been identified as a contributing factor in almost half (48%) of all single vehicle crashes.

Road surface hazards, such as potholes, diesel or loose gravel on a sealed surface, were also a contributing factor in almost one in five single vehicle crashes (18%).

Such hazards were more commonly associated with crashes on curves than on the straight (23% vs 14%) and were a contributing factor in 10% of fatal crashes on curves. See Table 2.

Table 2. Summary of factors in single vehicle crashes by road alignment, 2004-2008

	All Single vehicle crashes	Crashes on curves (n=2431)	Crashes on straight roads (n=2543)
All crashes	100%	49%	51%
Excess speed for	48%	84%	13%
Fatigue	15%	12%	17%
Road surface	18%	23%	14%
Animal on the road	3%	9%	6%
Under 26 years	36%	40%	32%
Over 40 years	18%	23%	14%

A more in-depth analysis of these crashes is available in *"Positioned for Safety 2010"* from the MCC of NSW

Unlicensed riders constitute a substantial proportion of the riders who engage in high-risk activities.

The higher incidence of risk taking behaviour amongst unlicensed motorcycle riders is also observed amongst unlicensed car drivers.

Learners had a higher proportion of speed involved crashes (19%) compared to Provisional riders 16%). They were also more likely to be the key vehicle in intersection (18% vs 16%) and non-intersection (20% vs 17%) multivehicle crashes. They were also involved in a higher relative proportion of all single vehicle crashes than provisional riders (9% vs7%).

Table 4 Proportion of riders in crashes by their licence status and factors associated with their crash NSW 2003-2007

	All riders (n=11989)	Learner (n=1058)	Provisional (n=989)	Standard (n=6755)	Unlicensed (n=902)	Interstate/ Overseas (n=594)	Unknown (n=1624)
All crashes	100%	9%	8%	56%	8%	5%	14%
Casualty crashes	100%	9%	8%	56%	7%	5%	14%
Fatal crashes	100%	4%	4%	61%	24%	6%	0%
Rider at fault (Multi-vehicle crashes only)	38%	38%	33%	34%	53%	74%	31%
Proportion of single vehicle crashes	40%	39%	33%	39%	41%	54%	43%
Fatigue	7%	5%	4%	4%	10%	10%	8%
Speed	24%	19%	16%	18%	29%	35%	25%
Casualty without helmet	3%	0%	1%	0%	17%	1%	9%
Pillion casualty without helmet	0%	0%	0%	0%	2%	0%	1%
Pillion casualty	5%	1%	2%	6%	6%	8%	6%
Under 26 years	30%	56%	52%	11%	51%	22%	30%
Over 40 years	33%	6%	2%	34%	11%	42%	19%

Information on off-road riding injury or exposure is not readily available as these are not captured by the RTA data.

Many off-road injuries are captured in hospital records and there has been little research relevant to inquiry based on this data. Considerable effort would be required to extract meaningful data.

Many off road injuries occur on farms which we believe would be outside the Staysafe committee's terms of reference. However, injuries occurring in "road related areas" to unregistered or unlicensed riders emerging from off-road areas such as rural or urban private property, is relevant and remains largely unaddressed.

The real number of non-fatal crashes involving unlicensed riders, unregistered motorcycles or illegal blood alcohol levels is greater than estimated from Police-reported crash data. Thus, any conclusions that these crashes are more likely to be fatal than crashes not involving these factors are potentially spurious[5].

Basing road safety policy and programs on motorcyclist fatality data may address the relatively small number of fatalities but may be misdirected in terms of the factors involved in the much larger number of injury crashes[6].

A sound understanding of the underlying basis of available data is necessary to avoid misguided conclusions and inappropriate interventions.

[5] How valid are Motorcycle Safety Data? Haworth, N, MUARC, Road Safety and Policing Conference 2003
[6] ibid

Current measures and future strategies

Measures and strategies from the RTA are outlined in their Corporate Blueprint 2008-2012.

"The RTA Blueprint Corporate plan sets out the vision and values for the RTA and outlines the key priorities and milestones the organisation will deliver over the next four years and beyond. The Blueprint drives the organisational planning and performance management processes[7]."

Motorcycles are mentioned once, in terms of behavior modification. That single mention is reflected in the 2009 RTA Annual Report with the useful "Cornering" advertising materials.

In contrast, the Motorcycle Council of NSW road safety strategic plan, "Positioned for Safety 2010", contains the following strategies:-

Strategies for Safer People

1.1 There is a need to address the behaviour of those motorcyclists who ride without consideration for their own safety or that of other road users.

1.2 There is a need to address the behaviour of those drivers who lack awareness and consideration for motorcyclists' safety.

1.3 There is a need for motorcyclists to better understand and manage road hazard risks.

1.4 There is a need to address unlicensed riding and reckless behaviour.

1.5 The crash-reduction benefits of novice rider training and practice are not well established.

1.6 The motorcycle rider training and licensing scheme does not incorporate post-licence training or assessment.

1.7 There is a lack of courtesy and tolerance between all road users.

1.8 Safety information is not effectively disseminated to motorcyclists.

Strategies for Safer Roads

2.1 Road fixtures and furniture may create crash and injury risks for motorcyclists.

2.2 Maintenance and upgrading practices may create crash and injury risks for motorcyclists.

[7] http://www.rta.nsw.gov.au/doingbusinesswithus/lgr/downloads/information/rta-at-a-glance.html

2.3 The designers of new roads are not required to consider the specific vulnerabilities of motorcyclists.

2.4 Crash records are not used systematically to monitor and guide road maintenance practices.

Strategies for Safer Vehicles and Equipment

3.1 There is no independent, reliable information available to motorcyclists about the protective performance of motorcycle clothing and helmets.

3.2 There is no systematic monitoring or research into the safety of motorcycle engineering developments.

3.3 The vehicle regulations and Australian Design Rules systems do not provide adequate protection for road users.

Strategies for Coordination, Communication and Policy

4.1 Motorcycles are not recognised as a separate class of vehicle for road safety policy, or for traffic management and transport planning.

4.2 There is insufficient government investment in motorcycle safety research and development.

4.3 Police crash reporting does not provide sufficient information for analysing and researching motorcycle crash data.

4.4 There are insufficient avenues for consultation and independent advice to government on motorcycling issues.

4.5 There is insufficient industry involvement and support for motorcycle safety initiatives.

4.6 Government services do not adequately provide for motorcyclists.

4.7 The sustainability of motorcycle safety strategies depends on the resources of the MCC.

We refer the Committee to “Positioned for Safety 2010” for the detailed strategies contained within these headings.

While there was considerable activity during the period 2002 to 2007 to address motorcycle safety issues, particularly within local government programs, there have been few initiatives in recent years.

Current activities:-

- The MCC co-ordinates Motorcycle Awareness Week which is an initiative to raise the awareness of other road users to the role they play

in reducing motorcycle crashes. This event receives funding from the RTA

- Breakfast Torque is a local government road safety initiative of Sutherland, Rockdale and Kogarah Councils which is supported by the MCC, the Ulysses Club and motorcycle dealers. It is conducted during Motorcycle Awareness Week
- The Motor Accidents Authority and the MCC have a motorcycle safety working group. The MAA has made some funding available to this working group which has been used to reprint of a number of safety booklets and the production of safety videos.
- Motorcycle Accident Rehabilitation Initiative (MARI). St Vincent's Hospital has established an identification and rehabilitation initiative for riders injured in motorcycle accidents who present to the Hospital's Emergency Department. This program has been established as a result of a donation by George and Charis Schwartz. The initiative has been extended to other hospitals.
- The RTA has available a number of publications including a Learner Riders Handbook, a brochure on helmets, posters and rider handbook called Braking Habits.
- “Survive the Ride” is an independent association which promotes road safety through its website, conducting safety workshops and charity events
- NRMA are producing a series of Fact Sheets on motorcycle safety for distribution through their information trailer.

Integration in planning and management of road systems

Strategy 4.1 of *"Positioned for Safety"* is in response to the lack of inclusion of motorcycles in traffic management and transport planning. There has been little progress on changing this situation.

The recently released government transport plan recognises the benefits of public transport, cycling and walking as sustainable means of transport but fails to include the advantages of motorcycles.

This lack of inclusion in transport planning and traffic management has resulted in motorcycles only being considered as an enforcement issue.

The City of Sydney[8] and the Victorian government[9] have developed plans that address both transport planning and road safety issues for motorcycles.

Motorcycles are largely invisible to public policy. There is little, if any consultation on matters affecting motorcycles. Interventions designed to improve safety for other road users may have a negative effect on motorcycle safety. Lack of consideration of motorcycle safety issues and tokenism has led to little substantive change.

The MCC of NSW recommends the establishment of an independent motorcycle advisory committee as a secretariat to provide relevant advice to government on matters affecting motorcycles.

[8] Motorcycle and Scooter Strategy and Action Plan 2008 – 2011, Sydney City Council

[9] Victoria's road safety and transport strategic action plan for powered two wheelers 2009 2013

Issues and Strategies in other jurisdictions

Victoria, Tasmania, South Australia, Western Australia and Queensland all have strategies that have been developed by government in consultation with rider groups

The federal Department of Infrastructure, Transport, Regional Development and Local Government in conjunction with the Federal Chamber of Automotive Industries, held a seminar on motorcycle safety in 2008. The recommendations of the seminar have been published[10]

A copy of the *Motorcycle and Scooter Safety Summit: The Road Ahead*, is available from the following website:- http://www.infrastructure.gov.au/roads/safety/publications/2009/pdf/msss_report.pdf

[10] Motorcycle and Scooter Safety Summit:The Road Ahead, 2008, Motorcycle Safety Consultative Committee, Department of Infrastructure, Transport, Regional Development and Local Government.

Other related matters

(1)
It is essential that there be consultative forum between government and the motorcycling community.

Prior to 2005 there was a committee convened by the RTA with representation from the Motorcycle Council, the MTA and FCAI.

This committee met every 6 months for over 10 years. The MCC withdrew from this committee after a failure of the RTA to consult.

The MCC attempted to re-establish this committee in 2009 but these attempts petered out after 3 meetings due to lack of interest by the RTA.

The rapid turn-over in Ministers for Roads has led to complete discontinuity and a vacuum of informed decision making. As a result, the Minister has not been able to provide the RTA with clear policy direction.

The MCC has not been able to engage with any of the recent ministers, with letters handed off to the RTA for answers and no interest in meeting with the MCC to clarify matters.

An independent advisory committee is urgently required.

In Victoria, the Victorian Motorcycle Advisory Committee is appointed by the Minister and convened by Vicroads. In Queensland a motorcycle safety group is convened by Queensland Transport. Similar road authority convened groups exist in other states.

(2)
Currently in NSW there are no staff within any of the government agencies employed full time to address motorcycle safety issues. This is in contrast with Victoria where VicRoads has 3 full time staff and Queensland Transport and Main Roads have 3 full time staff.

(3)
During the period 2002 to 2007 there were a number of very success local government road safety initiatives in NSW. Of all of these initiatives, Breakfast Torque is the only survivor. Funding for Local Government road safety programs is now largely absent, save for “extension” of RTA programs.

Authorities need to understand that not all wisdom originates from head-office, that one size does not fit all. Regional offices are quite often in a better position to understand local problems, are able to generate social capital and expand the capacity of local networks[11].

[11] Austroads AGRS04/09 : Guide to Road Safety - Part 4: Local Government and Community Road Safety

The ability to generate social capital and expand capacity were very much evident in local government motorcycle safety initiatives that have been discontinued.

Road safety data for the whole State is an aggregation of varying conditions in different regions across the State. Local patterns of crashes vary considerably, e.g. crash patterns within the town boundary of rural towns and cities may have some similarities to the patterns of crashes in some suburban areas of Sydney. Rural road or main connecting road crash patterns are very much dependent upon geography, geology, climate, road design and maintenance practices in these areas as well as traffic volumes and local land use.

(4)
Victoria has conducted a range of motorcycle road safety trials. Evaluations of these trials have established that many of them have been very successful.

These need to be implemented in NSW.

For example, the Black Spot program and the implementation of development/construction and maintenance reinstatement works that can be carried out to improve safety for motorcyclists.

Unless they are motorcyclists themselves, those who design, construct and maintain the road network have little understanding of what constitutes a road hazard to a motorcyclist. This issue has been addressed in Victoria by the introduction of a program called “Making roads motorcycle friendly”, a program including seminars and the development of a DVD.

A series of seminars, using the “Making roads motorcycle friendly” material are run by Vicroads to educate road engineers and “raise awareness of the vulnerability of motorcyclists in terms of the road environment”[12].

http://www.ite.org.au/Documents/Seminars/2010/VicRoads_Mcycles/Making_Roads_Motorcycle_Friendly_v1.pdf

(5)
A way forward, in our opinion, is to turn riders into good risk managers. A good risk manager understands the risks and also understands how to manage those risks. Hence, we need to provide specific and useful information to riders on the risks and on what strategies they can use to minimize and manage these risks.

[12] Monday 6 September 2010, 5pm to 6.30pm, at VicRoads Theatrette (Ground Floor, 60 Denmark St, Kew) Convener: David Shelton, Executive Director Road Safety & Network Access

Motorcyclists are passionate about their chosen means of transport and recreation. This passion is not seen to the same extent in other road user groups. The MCC of NSW is uniquely positioned to harness this passion to improve motorcycle road safety. Negative messages from road authorities simply confirms to riders that they are deliberately excluded and forced to justify on a daily basis, their valid and legal means of transport.

The concept of 6 degrees of separation is very relevant for motorcyclists. Riding is a very social activity and riders easily relate to and communicate with other riders. This network between riders needs to be exploited by developing social marketing messages that pass from one rider to another.

To be credible, road safety messages need to address both the role of other road users in improving motorcycle safety as well as addressing the role riders themselves need to play.

(6)

Australia has adopted the “Safe System” approach for its next 10 year road safety strategy. The Safe System relies heavily on safer roads, safer vehicles and safer speeds.

The “Safe system” approach shifts the responsibility for road safety away from road users and onto road designers and vehicle manufacturers.

Road users have had their behavior modified through advertising to believe that they only need to obey the road rules to be safe.

Further, road users now adopt the attitudinal approach that government policy has more to do with enforcement than driving or riding safely.

While motorcyclists will gain some benefit from safer roads and safer vehicles, it is likely to be substantially less than that of other road user groups.

(7)

In 1999 Austroads produced a “Guide to Traffic Engineering Practice Part 15 – Motorcycle Safety”. This publication is an excellent educational resource and has been copied by road authorities overseas. Unfortunately Austroads has decide to withdraw this guide and dilute the information in other publications.

Unlike other Guides in this Austroads series, the recommendations of Part 15 are yet to be implemented.

This Guide needs to be reintroduced so road safety practitioners have at least one resource to refer to when implementing engineering solutions to improve motorcycle safety.

(8)
It has been assumed that motorcyclists are adequately covered by road safety programs directed at motorists in general, however, there is no evidence to establish whether this is indeed the case.[13]

The RTA 2009 Annual Report lists expenditure on various road users, describing in great detail, the specific engineering requirements for pedestrians and bicycle riders. It is apparent that specific engineering requirements for motorcycles are invisible.

Whilst the "Cornering" program receives mention for the last year, the total spent on specific motorcycle safety initiatives since 2002 is around $4 million, of which the sum of $20,000 a year is provided to the MCC of NSW in support of Motorcycle Awareness Week.

In contrast, expenditure on bicycles and pedestrians, is readily located by a word search of the electronic document, e.g. the entire section on Transport carries no mention of motorcycles in major projects despite detailed information on pedestrian and bicycle facilities, such as p20 "bicycle and pedestrian bridge…..$15 million"; p30, "The total estimated RTA expenditure on bicycle facilities in 2008-09 was $29.3 million" or "For the annual NSW Bike Week in September 2008, the RTA provided seed funding to more than 50 bicycle events organised by local communities throughout the State." p210 "The Bicycle Advisory Council (BAC) was established to advise the Minister for Roads....". p214 "Continued to support bicycle and pedestrian facilities and infrastructure." p262 "$316,000 to Bicycle NSW" and "$100,000 to Bicycle NSW".

The RTA Annual Report provides basic detail on the "Enhanced Enforcement Program" in which the RTA "hires" the NSW Police for enforcement activity on specific items. One target of this program is motorcycle helmet enforcement.

With release of a new Road Rule in respect of motorcycle helmets Gazetted 5 February 2010, enforcement will apparently be based upon an advertising sticker.

There was no consultation on the introduction of this new Regulation. It appears that the RTA has again, relied on their own cognizance and the delegated legislative authority of the Minister of the moment.

(9)
To classify motorcycle users as "vulnerable" road users is part of the language of disregard within a culture of roads management that manages for large cars. Other road users are identified as a "problem" that are awkward to accommodate. The words "problem" and "vulnerable" form core elements of the lexicon used when discussing motorcycles, bicycles and pedestrians.

[13] "Positioned for Safety" http://roadsafety.mccofnsw.org.au/a/63.html

If we have one group of road users who are “vulnerable”, then the self-evident corollary is that other road users are “invulnerable”.

This administrative stance is illustrated by the following quote from the 2009 RTA Annual Report:-

> “The forecast increase in the number and size of heavy vehicles and the increases in smaller light vehicles and motorcycles presents a real road safety challenge.”[14]

An inherent assumption in roads management is admitted in this view. Road users other than large “safer cars” are a challenge to the RTA.

That “safer cars”, an engineering solution paid for by the purchasers of these “safer cars” has been adopted as the main criteria for road safety management. Safety gains obtained from lower injury and fatality rates by the invulnerable occupants of “safer cars” is now claimed as evidence of success of administrative practices in roads management.

Any other vehicle type or road user type that does not meet this narrow definition of “safer cars” or “invulnerable road users”, becomes a problem to the blueprint laid out by the RTA in its Safe Systems approach.

The “Safe Systems” approach relies on invulnerable road users and provides little accommodation for motorcycle riders, bicycle riders or pedestrians.

The relative invulnerability of occupants of “safer cars” has led to lower crash reporting requirements, hence distorting available data relative to “all crashes” through systemic under-reporting.

Invisibility in data of a large number of car crashes leads to erroneous conclusions that “safer cars” do not crash as frequently as other vehicles. Using crash rates of this class of road user as a yardstick measure against which the relative safety of other road users may be measured, is likely to lead to erroneous conclusions of strategy effectiveness.

The Safe Systems approach relies upon engineering of roads and cars and slavish adherence to Road Rules, allowing crashes to continue to occur, but attempting to reduce the casualty consequences through invulnerability. This approach does not appear to reduce crashes, although limited data may indicate this.

The present fixation with “safer cars” or invulnerability as a policy pivot means any other class of road user is a poor fit to such a policy. In varying degrees, as the relative invulnerability is triaged for expenditure against those road users where there is no policy fit at all, we find the words “vulnerable” and “problem”. Some would label this approach as intellectual laziness.

[14] 2009 RTA Annual report, Page 64

As a society, we try and take care of our vulnerable members, the weak, disadvantaged and mentally incompetent. We also seek to incarcerate those persons who are a problem to society. Casting road safety debates in prejudicial terms risks externalising responsibility through blame and paternalism.

Recommendations

We suggest that the StaySafe Committee recommend:-

1. The establishment of a motorcycle advisory council reporting to the Minister for Roads

2. The employment of full time staff to address motorcycle safety issues

3. The re-establishment of the Local Government motorcycle road safety program

4. The implementation of successful programs developed in Victoria such as “motorcycle black spot” and “educating roads engineers”

5. The development of social marketing message for riders

6. Examining the suitability of the “Safe System” approach to improve motorcycle safety

7. Re-introduce the Austroads “Guide to Traffic Engineering Practice Part 15 – Motorcycle Safety” and provide for its implementation in NSW.

8. Include motorcycles as a unique and independent road user group in transport planning and traffic management so motorcycles are recognised as a sustainable form of transport. Provide management guidelines to ensure motorcycles are adequately addressed in safety planning.

9. Seek evidence based and equitable funding of road safety initiatives across all road user classes to ensure accommodation of, and expenditure on, motorcyclists as road users is equitable.

Submission No 41
Appendix 1

INQUIRY INTO VULNERABLE ROAD USERS

Organisation: Motorcycle Council of NSW

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Date Received: 6/08/2010

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Motorcycle safety in NSW, 2004-2008 – Some Facts

MCC of NSW
www.roadsafety.mccofnsw.org.au

Each year the MCC commissions this report to provide up to date information on motorcycle crashes to help riders understand and manage their risks. The following information is based on analysis of RTA data for motorcycle crashes reported to police in NSW between 2004 and 2008.

Summary 2004-2008

- Over the five years (2004-08), there were 12,257 motorcycle crashes in NSW, including 305 which resulted in the death of a rider or pillion.
- The number of crashes per year has increased by 17% since 2004. The increase in crashes is partly due to the increase (39%) in the number of registered motorcycles and scooters and any analysis of trends needs to take account of that fact. Overall the number of motorcycle crashes has decreased from 215.9 to 180.9 per 10,000 registered motorcycles.
- The number of rider fatalities per year has decreased by 10%. Relative to the number of registered motorcycles, the fatal crash rate has dropped from 5.7 to 3.7 per 10,000 registered motorcycles.
- The proportion of scooters involved in crashes has more than doubled since 2004. They now represent 5% of powered two wheelers in crashes compared to 2% in 2004, but are still a far smaller proportion than other styles such as sports bikes which account for 18% of crashes.
- Four out of ten motorcycle crashes are single vehicle, loss of control crashes.
- Half of single vehicle motorcycle crashes are on curves, and 23% involve a road surface hazard such as loose gravel, diesel spill or a pothole.
- The other driver is likely to be at fault in 62% of crashes with a motorcycle, but 71% of intersection crashes.
- Riders are most likely to be at fault in rear end (62%), and head-on crashes (82%). Head-on crashes when not overtaking, are the most common type of head-on crash (69%) and are usually due to the rider crossing or leaning over the centre line while cornering.
- Over half the riders who crash, hold a full licence (57%), Learners represent 9% and those with Provisional licences 8%, of riders in crashes.
- Learner riders are, on average, much older than learner drivers. The average age of a newly licensed rider is 33 years, compared to 18 for a newly licensed driver.
- Young riders (17-25) are more likely to be involved in a crash with another vehicle, and more likely to be at fault in that crash, than are older riders (40+).
- Unlicensed riders represent 8% of all riders in crashes but 24% of those in fatal crashes. They are more likely to be the key vehicle in a crash and more likely to be carrying a pillion who is injured.

Note: This analysis is based on data provided by the RTA for the period 2004-2008. It does not necessarily reflect the views of the RTA.

The crash rate

The number of motorcycles registered in NSW has increased by 39% in just five years from over 105,000 in 2004 to nearly 147,000 in June 2008. Over the same period of time, the number of motorcycle crashes has increased by 17% (see Table 1).

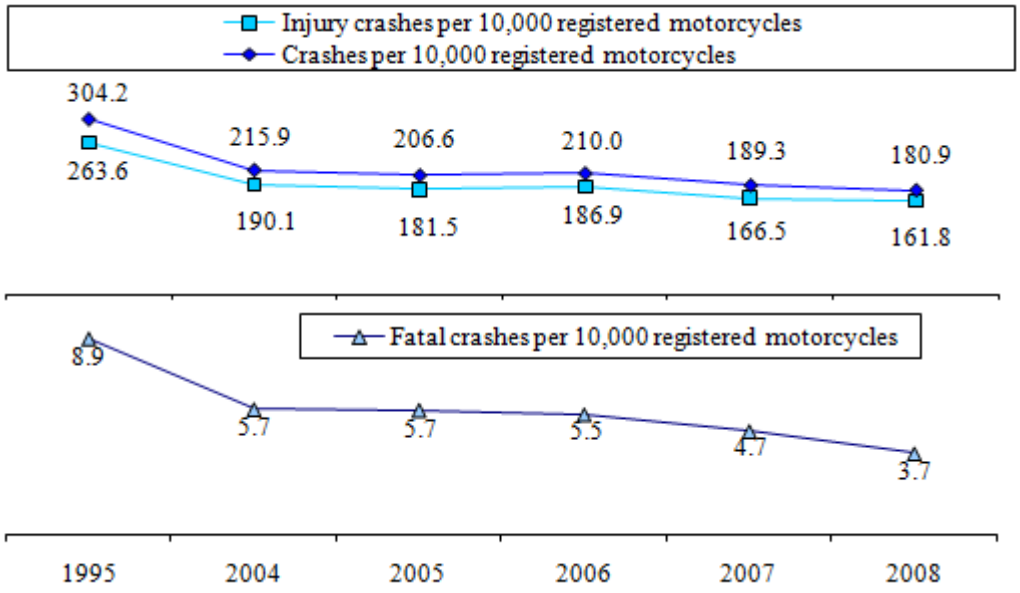
Table 1. Number of crashes in NSW, 2004-2008

Severity of crash	2004	2005	2006	2007	2008	2004/2008
Fatal	60	63	66	62	54	-10%
Injury	2002	2019	2258	2196	2372	+18%
Non-casualty(tow away)	211	216	214	239	225	+7%
Total	2273	2298	2538	2497	2651	+17%

This does not mean that motorcycling is becoming more dangerous, but is a reflection of the increasing number of motorcyclists on the roads, the crash rate per 10,000 registered vehicles has decreased substantially. While, this is encouraging more needs to be done to make motorcycling safer for the increasing proportion of road users who choose this type of transport.

Figure 1 illustrates the rate per 10,000 registered motorcycles for fatal, injury and all crashes over the past five years and compares this to the rates in 1995.

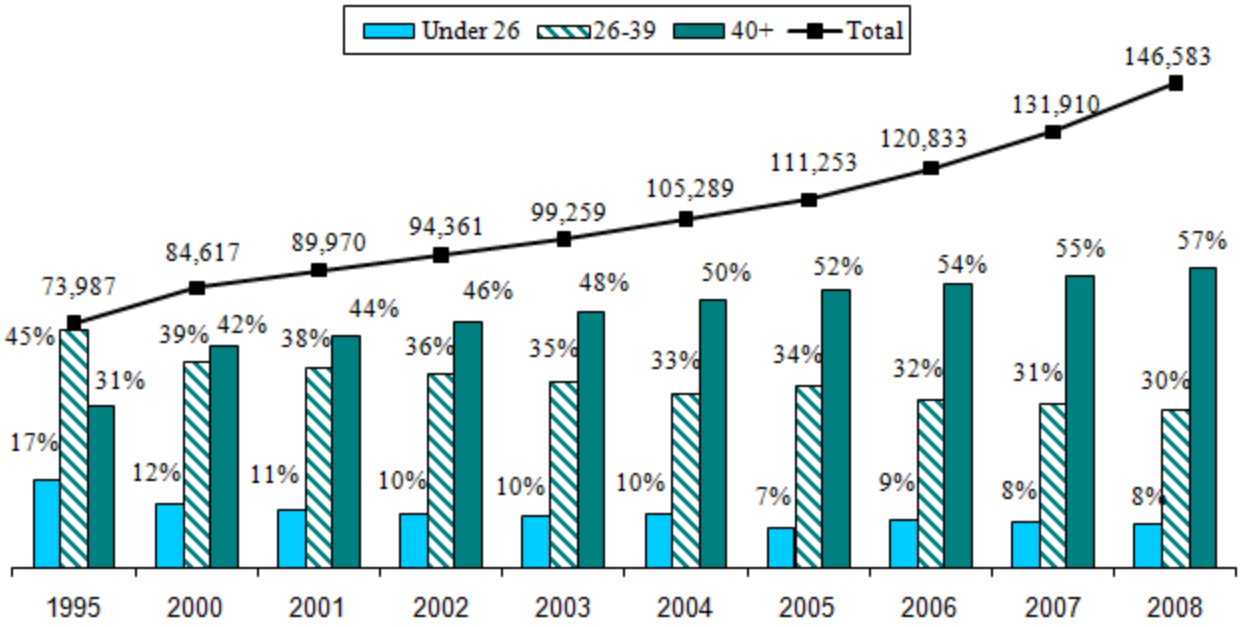
Figure 1. Number of crashes per 10,000 registered motorcycles in NSW, 1995/2004-08



Age of riders in NSW

The average age of a motorcyclist in NSW is now 43 and the proportion of older riders continues to increase. The number of registered owners aged 40 plus in NSW has increased by almost 30,000 riders since 2004, whereas the number of riders aged 26-39 have increased by less than 10,000 and those under 26 have increased by only 1,600. Riders aged 40 plus now represent 57% of all registered owners. Figure 2 illustrates the changing trend in registrations.

Figure 2. Age of registered owners of motorcycles in NSW, 1995-2008

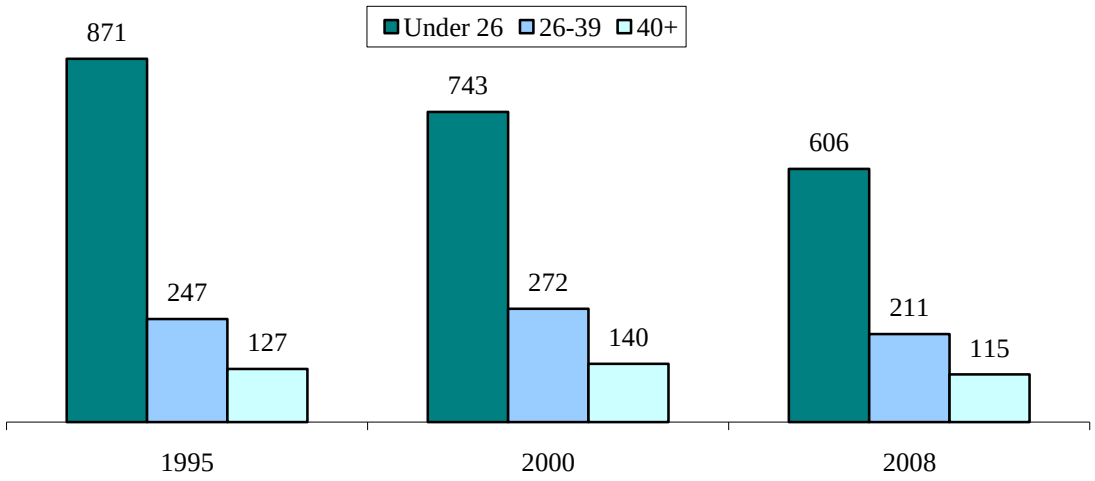


Young riders

Although young riders (aged 17-25), are the registered owners of only 9% of motorcycles, they are involved in 26% of reported crashes. Figure 3 illustrates the crash rate in terms of the number of crashes per 10,000 motorcycles registered to each age group in 1995, 2000 and 2008.

In 2008 young riders (under 26) had 606 crashes per 10,000 registered vehicles, compared to 211 crashes for riders aged 26-39 and 115 crashes for those aged 40 or more. The young rider's crash rate is substantially less than it was in 1995 (n=871), but is still very high when compared to older riders.

Figure 3. Number of crashes per 10,000 registered owners by age group.

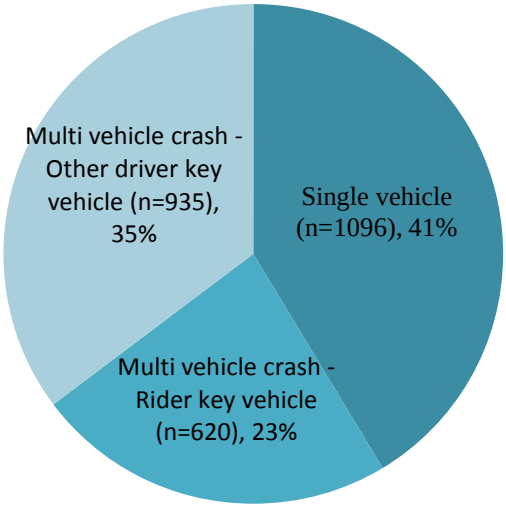


Types of crashes

The characteristics and causes of motorcycle crashes can be best understood by distinguishing between three different types of crash: multi-vehicle collisions due to the rider's action (23%), multi-vehicle collisions due to the other driver (35%); and single vehicle crashes (41%).

Although it is difficult to determine fault from crash data, it is possible to identify the key vehicle whose movement was primarily the cause of the first impact.[1] Figure 4 illustrates the distribution of motorcycle crashes by key vehicle in 2008.

Figure 4. Types of crashes by key vehicle in NSW, 2008



While there have been some slight changes in the proportions of single-vehicle relative to multi-vehicle crashes, from 39% to 41% of all crashes and, the proportion of multi-vehicle crashes due to the actions of the other vehicle have decreased slightly from 38% to 36%. See Table 2. Perhaps the most interesting data is in the rates of each type of crash per 10,000 registered motorcycles in NSW. It is apparent here that for all types of crash this has decreased substantially in the past 5 years.

Table 2. Types of crashes and key vehicle each year, NSW, 2004-2008

Type of crash	2004 N=2310	2005 N=2343	2006 N=2574	2007 N=2541	2008 N=2697
Single vehicle	39%	39%	40%	41%	41%
Key Vehicle:					
Other driver	38%	39%	38%	37%	36%
Rider	22%	23%	23%	23%	23%

Table 3. Types of crashes and key vehicle each year, NSW, 2004-2008

Crash rate per 10,000 registered motorcycles	2004	2005	2006	2007	2008
Single vehicle	86.6	81.3	84.6	78.8	74.8
Rider key vehicle	49.1	48.1	48.4	43.4	42.3
Other driver key vehicle	80.2	77.1	77.0	67.0	63.8
All crashes	215.9	206.6	210.0	189.3	180.9

[1] The key vehicle is based on the Road User Movement (RUM) Code, which describes the movement that resulted in the first impact. The key vehicle is usually responsible for the crash, but is not necessarily legally at fault. A vehicle turning across the path of another will always be defined as the key vehicle, even if they had right-of-way (e.g. green light arrow).

Single vehicle

Motorcycles have a much higher incidence of single-vehicle crashes than do cars (41% vs 24% in 2008).

Single vehicle crashes account for over two fifths (43%) of all motorcycle fatalities. Single vehicle crashes are almost equally likely to occur on curves as on straight sections of road (49% vs. 51%), but most fatal single vehicle crashes (75%) were on curves.

Excessive speed for the conditions was identified as a contributing factor in almost half (48%) of all single vehicle crashes. Road surface hazards, such as potholes, diesel or loose gravel on a sealed surface, were also a contributing factor in almost one in five single vehicle crashes (18%). Such hazards were more commonly associated with crashes on curves than on the straight (23% vs 14%) and were a contributing factor in 10% of fatal crashes on curves. Animals on the road were identified as a contributing factor in a further 6% of cases. See Table 4.

Table 4. Summary of factors in single vehicle crashes by road alignment, 2004-2008

	All Single vehicle crashes (n=4975)	Crashes on curves (n=2431)	Crashes on straight roads (n=2543)
All crashes	100%	49%	51%
Excess speed for conditions	48%	84%	13%
Fatigue	15%	12%	17%
Road surface hazard	18%	23%	14%
Animal on the road	3%	9%	6%
Under 26 years	36%	40%	32%
Over 40 years	18%	23%	14%

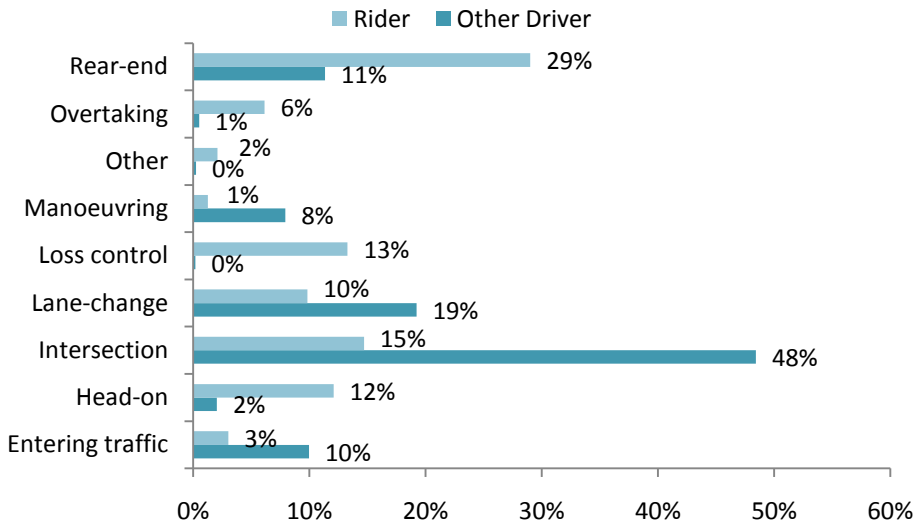
Collisions with other vehicles

While the number of crashes has increased since 2004, the proportion involving other vehicles has remained constant. Overall, 61% of all collisions between a motorcycle and another vehicle were caused by the actions of the other driver.

Collisions where the rider is most likely to be the key vehicle include rear-end and head-on crashes. Over the 5 years there were over 1,326 reported rear end crashes involving a motorcycle, of these 62% were due to a motorcycle running into another vehicle. These crashes comprise 29% of all crashes where the motorcycle was the key vehicle.

There were 197 head-on crashes (while overtaking) and 433 head-on crashes (not overtaking). The motorcycle was the key vehicle in 82% of all head-on crashes, including 88% of the overtaking crashes and 62% of the not-overtaking crashes. The majority (83%) of the head-on (not-overtaking) crashes occurred on corners, and may be most likely due to the rider running wide or even just leaning over the centre line while cornering. Figure 5 illustrates the distribution of types of crashes where riders were the key vehicle, compared to the distribution of those due to the other driver.

Figure 5. Key vehicle multi-vehicle collisions, 2004-2008



Intersections crashes

Intersection crashes represent almost half of all collisions due to the other driver. See figure 5 above.

Over half (56%) of all multi-vehicle collisions occur at intersections. Motorcycles are the key vehicle in 39% of all multi-vehicle crashes, and much less likely to be at fault in an intersection crash. These are most likely to be due to the actions of the other driver, who was the key vehicle in 70% of intersection crashes. Responsibility for non-intersection crashes is equally likely to be the rider or the other driver.

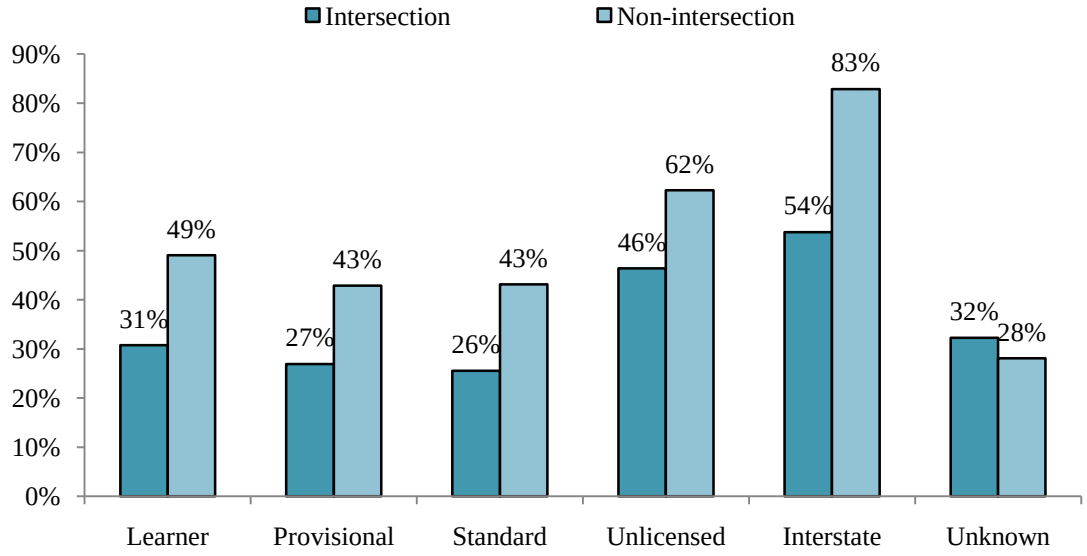
In NSW, T-junctions are the most dangerous type of intersection for motorcyclists. Almost a third (30%) of all motorcycle collisions with another vehicle occurred at T-junctions, with the other driver being the key vehicle in 70%. Cross roads accounted for 19% and roundabouts for only 6% of collisions. The other vehicle in intersection crashes was most likely to be in a car (82%) or light truck (9%).

Age and experience

Licence status

When involved in an intersection crash, unlicensed (46%) and learner riders (31%) were more likely to be the key vehicle than riders with provisional (27%) or standard licences (26%). Learners and unlicensed riders were also more likely than provisional or standard licensed riders to be the key vehicle in non-intersection crashes. Interstate riders were more likely than any NSW licensed riders to be the key vehicle in both intersection and non-intersection crashes. See Figure 6.

Figure 6. Proportion of Intersection and non-intersection collisions where rider was the key vehicle by licence status, 2003-2007

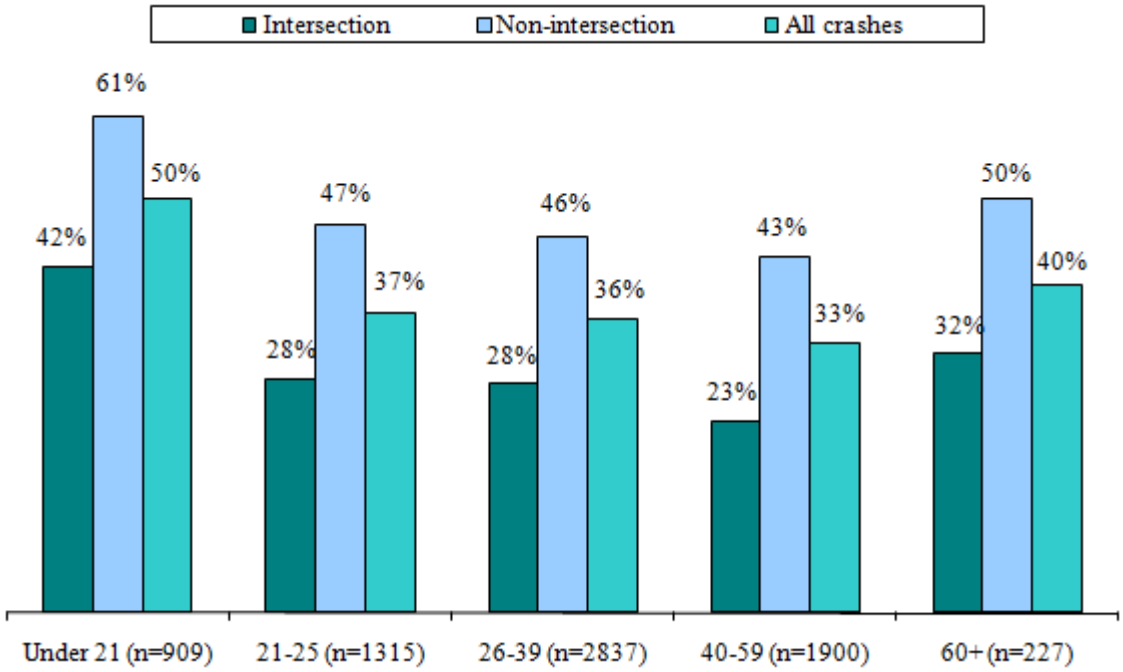


Young riders

Young riders (ie under 26 years) are more likely to be involved in multi-vehicle crashes (that is a crash with another vehicle (63%) than single vehicle crashes. By comparison, just over half (54%) of crashes involving older riders (40 plus) are involve another vehicle. In addition, although in general multi-vehicle crashes are more often due to the action of the other driver (62%), young riders were more likely than older riders (42% vs. 34%) to be at fault in these collisions.

Young riders are also more likely to be the key vehicle involved in an intersection crash. In the five years (2004-2008), riders aged under 21 years were involved in 909 multi-vehicle crashes. They were the key vehicle in 50% of those crashes, including 42% of intersection crashes and 61% of non-intersection crashes. This compares to only 33%, 23% and 43% respectively for riders aged 40-59. Riders over the age of 60 are also somewhat more likely to be at fault in intersection and non-intersection crashes (32% and 50% respectively), although the total number of crashes involving this age group was relatively small (n=227). See Figure 7.

Figure 7. Proportion of riders within each age group who were the key vehicle in intersection, non-intersection and all crashes, 2004-2008.



Trucks in collisions with a motorcycle

Collisions with heavy vehicles such as trucks or buses represent only a relatively small (4%) proportion of all multi-vehicle motorcycle crashes, but a higher proportion of multi-vehicle fatal crashes (18%). Fatal crashes comprise 18% of all multi-vehicle crashes involving heavy trucks compared to 4% and 2% for light trucks and cars respectively. Crashes involving light trucks are also more likely to result in severe injuries. While light trucks were involved in only 10% of motorcycle crashes, these included 19% of multi-vehicle fatal crashes. By comparison, where as collisions with cars are far more common (79%), they account for a comparatively lower proportion of fatal collisions (59%).

Failure to give way

The most common error by the other driver (48%) was failure to see or give way at an intersection. The other most common causes of crashes due to the other vehicles included changing lanes (19%) and failing to give way when entering traffic (10%).

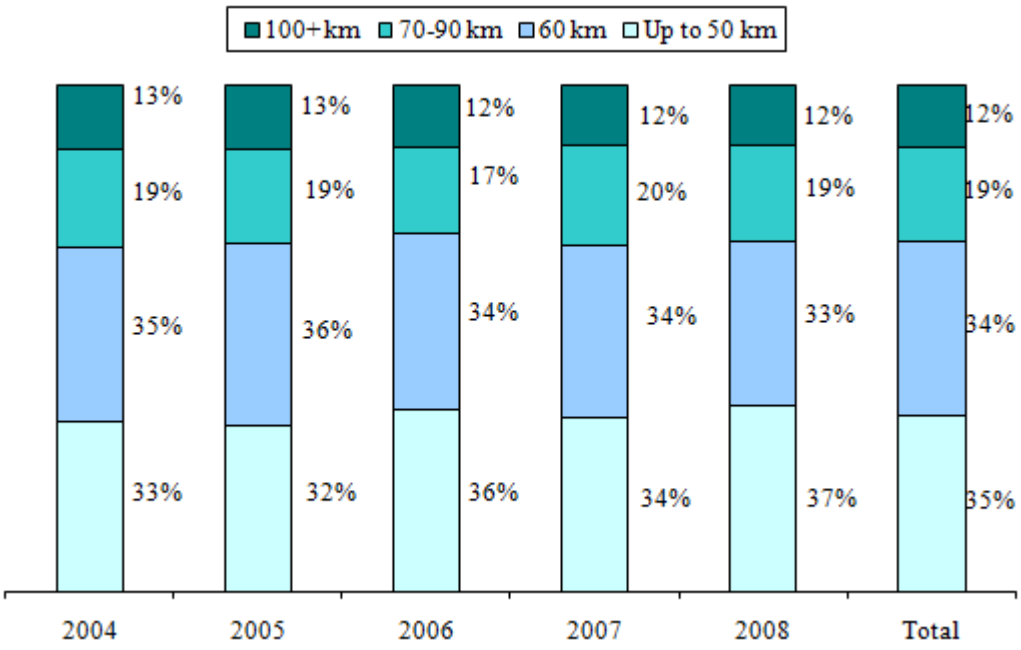
Rider errors

Rear-end and head-on crashes represent 18% and 6% of all multivehicle crashes, but are more likely due to the actions of the motorcyclist. Motorcycles were the key vehicle in the majority of these crashes (rear-end 62% & head-on 79%). Rear end collisions are generally due to the rider failing to maintain a sufficient space to the vehicle in front. Rider errors in head on crashes are not generally not while over taking, but typically occur on corners where the rider crosses or perhaps leans over the centre line, into the head-on zone.

Most crashes occur in low speed areas

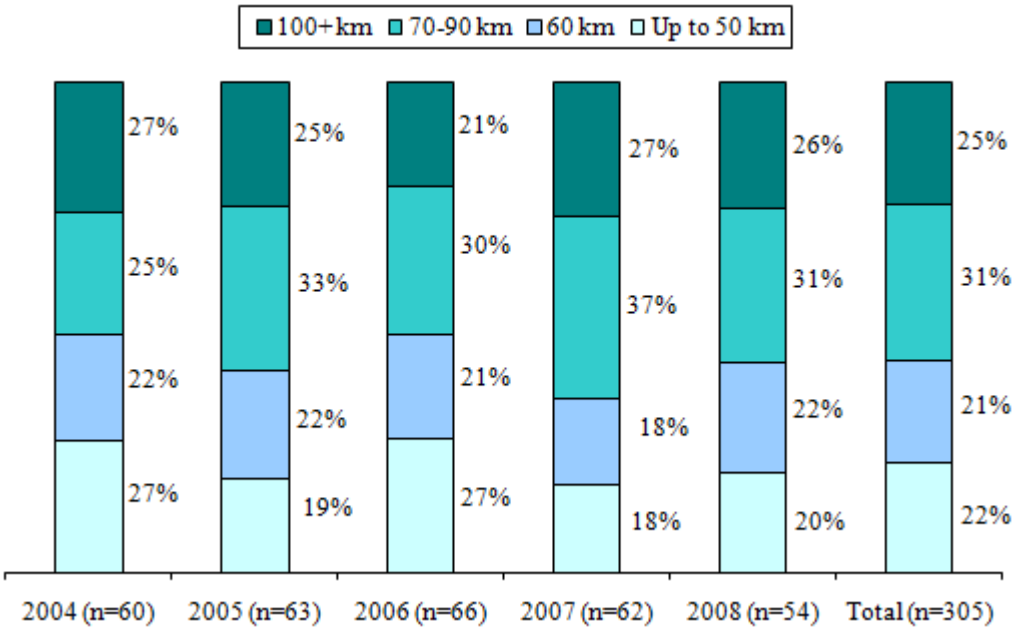
Most motorcycle crashes (69%) take place on roads zoned 60 km/h or less, only 12% of crashes take place on roads zoned 100 km/h or more. See figure 8.

Figure 8. Proportion of motorcycle crashes by speed zone NSW, 2004-2008



Across the 2004-2008 period, 43% of all fatal motorcycle crashes occurred in areas zoned 60 km/h or less while 25% occurred in areas zoned 100km/h or more. The small numbers involved (around 60 per year) mean that no clear trends can be identified. See figure 9.

Figure 9. Speed zone at site of fatal motorcycle crashes in NSW, 2004-2008



Alcohol

Over the 2004-2008 period 3.2% of motorcycle crashes involved a rider with an illegal blood alcohol content, compared to 2.4% of all vehicle crashes. See Figure 10.

When alcohol was involved in a motorcycle crash, it was more likely to be the rider (4.7%) than the other driver (0.5%), who had illegal blood alcohol content. See Figure 11.

Figure 10. Proportion motorcycle compared all crashes involving illegal BAC, 2004-2008

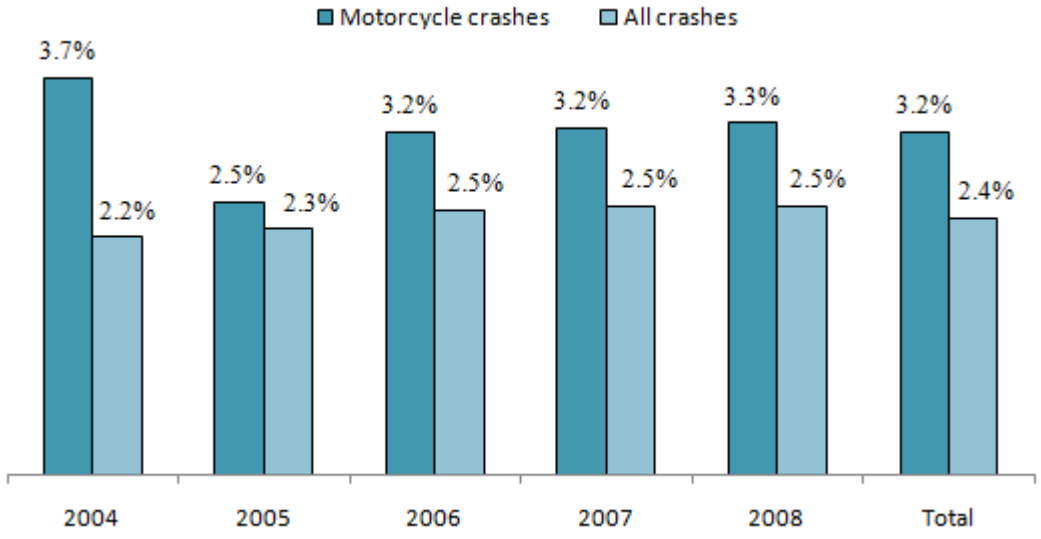
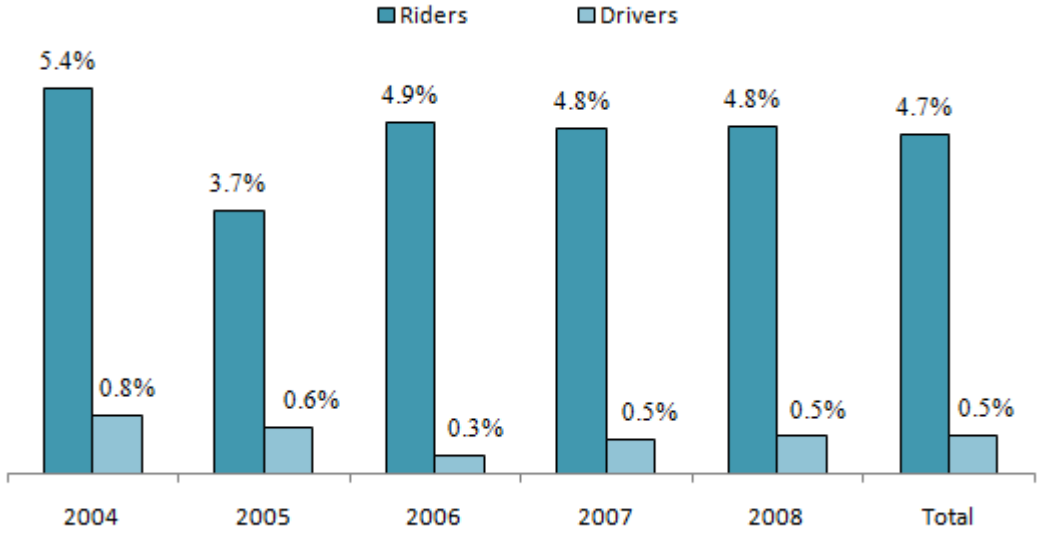


Figure 11. Proportion of riders and drivers involved in motorcycle crashes with illegal BAC, 2004-2008



Licence status

Unlicensed riders constitute a substantial proportion of the riders who engage in high-risk activities. The higher incidence of risk taking behaviour amongst unlicensed motorcycle riders is also observed amongst unlicensed car drivers.

Over the past 5 years (2004-08), there have been 902 unlicensed riders involved in motorcycle crashes in NSW. While these unlicensed riders comprised only 8% of all riders who crashed; they comprised 24% of the riders in fatal crashes, nearly half of whom were under 26 years (49%).

1. Unlicensed riders were more likely than licensed riders to be the key vehicle in a multivehicle crash (53% vs 34%). Unlicensed riders account for 8% of all riders in crashes but 7% of motorcycles who were the key vehicles in multivehicle crashes.
2. A higher proportion of unlicensed riders (29%) were involved in speed related crashes compared with licensed riders (22%). Unlicensed riders account for 9% of all riders involved in speed related crashes.
3. Nearly a fifth (17%) of all unlicensed riders who were injured were either not wearing a helmet, or wore a helmet that was not correctly fastened. They account for 45% of all un-helmeted riders.
4. Crashes involving unlicensed riders were more likely to involve a pillion casualty than crashes involving licensed riders (8% vs. 5%). Pillion casualties on motorcycles ridden by an unlicensed riders account for 9% of all pillion casualties.
5. Pillion casualties were more likely not to have worn a helmet if they were on a motorcycle ridden by an unlicensed rider than a licensed rider (1.9% vs 0.1%). Unlicensed riders account for 35% of all crashes in which a pillion casualty was not wearing a helmet.

Learners had a higher proportion of speed involved crashes (19%) compared to Provisional riders 16%). They were also more likely to be the key vehicle in intersection (18% vs 16%) and non-intersection (20% vs 17%) multivehicle crashes. They were also involved in a higher relative proportion of all single vehicle crashes than provisional riders (9% vs7%).

Interstate and overseas riders represented 5% of all riders involved in crashes and were more likely to be at fault in multi-vehicle crashes than those with valid NSW licences (74% vs. 34%).

Interstate and overseas riders also had a higher proportion of crashes involving fatigue (10% vs. 5%) and speed (35% vs. 22%) than NSW licence holders and comprised a higher proportion of controllers involved in crashes with a pillion casualty than NSW licence holders (8% vs. 5%).

Table 5. Proportion of riders in crashes by their licence status and factors associated with their crash NSW 2003-2007*

	All riders (n=11989)	Learner (n=1058)	Provisional (n=989)	Standard (n=6755)	Unlicensed (n=902)	Interstate/ Overseas (n=594)	Unknown (n=1624)
All crashes	100%	9%	8%	56%	8%	5%	14%
Casualty crashes	100%	9%	8%	56%	7%	5%	14%
Fatal crashes	100%	4%	4%	61%	24%	6%	0%
Rider at fault (Multi-vehicle crashes only)	38%	38%	33%	34%	53%	74%	31%
Proportion of single vehicle crashes	40%	39%	33%	39%	41%	54%	43%
Fatigue	7%	5%	4%	4%	10%	10%	8%
Speed	24%	19%	16%	18%	29%	35%	25%
Casualty without helmet	3%	0%	1%	0%	17%	1%	9%
Pillion casualty without helmet	0%	0%	0%	0%	2%	0%	1%
Pillion casualty	5%	1%	2%	6%	6%	8%	6%
Under 26 years	30%	56%	52%	11%	51%	22%	30%
Over 40 years	33%	6%	2%	34%	11%	42%	19%

References

RTA (2007) Registration Data as at June 2008, Roads and Traffic Authority of NSW, Sydney.

RTA (2008) New South Wales: Driver & Vehicle Statistics 2008, Roads and Traffic Authority of NSW, Sydney.

RTA (2008), NSW Road Traffic Accident Database, 2008, Roads and Traffic Authority of NSW, Sydney.

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