



PARLIAMENT OF NEW SOUTH WALES

Joint Standing Committee on Road Safety (Staysafe)

REPORT 1/56 - NOVEMBER 2015

INQUIRY INTO MOTORCYCLE SAFETY IN NSW





PARLIAMENT OF NEW SOUTH WALES

JOINT STANDING COMMITTEE ON ROAD SAFETY
(STAYSAFE)

INQUIRY INTO MOTORCYCLE SAFETY IN NSW

REPORT 1/56 – NOVEMBER 2015

New South Wales Parliamentary Library cataloguing-in-publication data:

New South Wales. Parliament. Joint Standing Committee on Road Safety (Staysafe).

Inquiry into motorcycle safety in NSW / Joint Committee on Road Safety (Staysafe), Parliament of New South Wales. [Sydney, N.S.W.] : the Committee, 2015. – [105] pages; 30 cm. (Report; no. 1/56).

Chair: Greg Aplin, MP.

“November 2015”

ISBN 9781921012198

Motorcycling—New South Wales—Safety measures.

Motorcycling accidents—New South Wales.

Traffic safety—New South Wales.

Traffic accidents—New South Wales—Prevention.

Motorcycling injuries—New South Wales—Prevention.

I. Title

Aplin, Greg.

Series: New South Wales. Parliament. Joint Standing Committee on Road Safety. Report ; no. 1/56

363.1259 (DDC22)

The motto of the coat of arms for the state of New South Wales is “Orta recens quam pura nites”. It is written in Latin and means “newly risen, how brightly you shine”.

Contents

Membership _____	iv
Terms of Reference _____	v
Chair’s Foreword _____	vi
List of Recommendations _____	viii
Glossary _____	xi
CHAPTER ONE – INTRODUCTION _____	1
CHAPTER TWO – MOTORCYCLE USAGE, INJURY AND FATALITY TRENDS IN NSW _____	2
TRENDS IMPELLING THE STRATEGY _____	2
TRENDS AT END OF THE FIRST 3 YEAR PLAN _____	2
DATA QUALITY & CRASH ANALYSIS _____	5
CHAPTER THREE – CRASH AND INJURY RISK FACTORS _____	9
SPEEDING _____	9
ALCOHOL AND OTHER DRUG USE _____	10
FATIGUE _____	12
RIDER AGE, INEXPERIENCE AND RIDING MANOEUVRES _____	13
UNLICENSED RIDING _____	15
LOW CONSPICUITY _____	17
INTERACTION BETWEEN MOTORCYCLISTS & OTHER ROAD USERS _____	17
ROADS AND ROAD ENVIRONMENT FACTORS _____	20
CHAPTER FOUR – SAFER ROAD MEASURES _____	23
MOTORCYCLE FRIENDLY ROADS & ROAD ENVIRONMENT DESIGN _____	23
MAINTAINANCE & OPERATION OF ROADS _____	26
ROAD SAFETY ASSESSMENTS/AUDITS _____	29
OTHER SAFER ROADS INITIATIVES _____	31
CHAPTER FIVE – SAFER PEOPLE MEASURES _____	35
SAFER MOTORCYCLIST BEHAVIOUR _____	35
SAFER DRIVER BEHAVIOUR _____	40
OTHER INITIATIVES AND PROGRAMS _____	46
CHAPTER SIX – SAFER VEHICLE, EQUIPMENT AND GEAR MEASURES _____	53
PROTECTIVE CLOTHING AND EQUIPMENT _____	53
HELMET STANDARDS AND USE _____	58
HIGH VISIBILITY GEAR & DAYTIME HEADLIGHTS _____	60
VEHICLE DESIGN _____	62
CHAPTER SEVEN – LICENSING AND TRAINING _____	70
LICENSING _____	70
UNLICENSED RIDING _____	72

JOINT STANDING COMMITTEE ON ROAD SAFETY

TRAINING _____	74
GOVERNANCE OF RIDER TRAINING _____	78
APPENDIX ONE – LIST OF SUBMISSIONS _____	84
APPENDIX TWO – LIST OF WITNESSES _____	85
APPENDIX THREE – EXTRACTS FROM MINUTES _____	87

Figures

Figure 1 - Motorcycle Casualties and Registrations, 1996 to 2014	3
Figure 2 -Fatalities per 10,000 Registered Vehicles, NSW, Motorcyclists v Other Motor Vehicle Occupants 2000 to 2014	4
Figure 3 - Motorcycle Crash Involvements per 10,000 Registered Motorcycles, Licensed Riders Only, Age of Rider Involvement x Motorcycles Registered by Owner Age Group, 2007	14
Figure 4 - Fatal and Matched Serious Injury Motorcycle Crashes, NSW, Key Vehicle Status,Type of Vehicle, 2009-2013	18
Figure 5- How a New Rider Progresses Through the Licensing Scheme	70

Membership

CHAIR	Mr Greg Aplin MP
DEPUTY CHAIR	Mr Scot MacDonald MLC
MEMBERS	Mr Adam Crouch MP
	Dr Mehreen Faruqi MLC
	Mr Nick Lalich MP
	Mr Adam Marshall MP
	The Hon. Daniel Mookhey MLC
	Ms Eleni Petinos MP
CONTACT DETAILS	Staysafe (Joint Standing Committee on Road Safety)
TELEPHONE	02 9230 2724
FACSIMILE	02 9230 3309
E-MAIL	staysafe@parliament.nsw.gov.au
URL	www.parliament.nsw.gov.au/staysafe

Terms of Reference

That the Committee inquire into and report on motorcycle safety in New South Wales with particular reference to:

1. Trends of motorcycle usage, injury and fatality in NSW;
2. Crash and injury risk factors including rider (and driver) behaviour, conspicuity and vehicle instability;
3. The effectiveness of the current action plan to enhance motorcycle safety including communications and education campaigns, road environment improvements, regulation of safety equipment and gear;
4. Strategies of other jurisdictions to improve motorcycle safety;
5. Licensing and rider training; and
6. Any other related matters.

Chair's Foreword

It is irrefutable that motorcyclists continue to be over-represented in NSW road trauma. The persistently high number of rider fatalities is a particular concern. Nevertheless, when taking into account the rate of increasing popularity of riding in NSW, the risk of motorcycling in NSW has decreased. This mixed message requires a refined, multifaceted and holistic policy approach, not only to further improve the overall safety of motorcycling in NSW, but also to reduce the number of rider fatalities in the State.

This report, the first Staysafe report tabled in the 56th Parliament, seeks to shape that policy response. To that end, the Committee has made a number of recommendations across four streams of policy responses: safer road measures; safer people measures; safer vehicle, equipment and gear measures; and licensing and training.

One of the key areas, which the Committee examined, is the hazard reporting system. Staysafe emphasised that there is scope for innovation and greater use of technology in improving the hazard reporting system. Integral to that is not just a closer cooperation, but a true partnership between the State road authorities and Local Councils in delivering road safety systems of the 21st century, which the people of NSW demand and deserve.

The Committee noted that overall, high risk rider behaviour appears to have decreased. The combination of enforcement, education and consultation seems to have played a vital role in this context. In particular, the fruitful partnership with the motorcycling community, which Transport for NSW has established, has become a vehicle for making a positive difference to riders' safety in the State. This is a good achievement and Transport for NSW can be rightfully proud.

Nevertheless, the Committee made it clear that there is no room for complacency. Addressing persistent crash risks such as speeding, alcohol and drug use and fatigue are just some of the areas that require continued effort. Moreover, Staysafe investigated whether a more holistic approach is required to address interaction between the different road users and improve road safety, not just for riders but also for drivers. To that end, Staysafe has made a number of recommendations to enhance driver skills, behaviour and awareness.

Another area of focus of the inquiry was protective clothing and gear for motorcyclists. While recognising that a significant amount of work has been completed to educate riders about protective clothing, Staysafe urges Transport for NSW and others involved to expedite and complete the development of a star rating system for protective clothing for motorcyclists. In this context, the Committee also recommended that the State Insurance Regulatory Authority works with the insurance industry to examine insurance price signals, which could incentivise the usage of protective clothing by motorcyclists and scooter riders.

The Committee did not recommend mandatory use of high-visibility clothing and acknowledged that this is a complex area and that conspicuity is also about rider positioning on the road. However, Staysafe considers that the effectiveness of mandatory high-visibility clothing in Victoria and France needs to be monitored and evaluated.

In relation to motor vehicle design and systems as ways of improving rider safety, the Committee stressed that – given rapid technological advancements – it is vital to monitor and continuously assess the usefulness and potential implementation of Intelligent Transport Systems as methods for improving road safety in NSW – not only for motorcyclists but for all road users in our State.

Lastly, Staysafe made a number of recommendations to renew and elevate efforts in reviewing the NSW Graduated Licensing Scheme and related matters to reflect best practice and recent developments in other jurisdictions. A particular emphasis in this context is the need to address the issue of unlicensed riding, possibly via an amnesty, in order to bring unlicensed riders into the licensing system. Furthermore, the Committee called for a multi-faceted approach to address the issue of returning riders. Staysafe also stressed the importance of adequate support for and ongoing professional training of riding instructors as a key ingredient to enhancing the safety of motorcycling in NSW. Finally, the Committee recommended that the supply shortage of rider training courses in rural and regional areas be addressed.

I am pleased to present this report and thank my fellow Committee Members and the Committee staff for their contributions and assistance.

Greg Aplin MP
Chair

List of Recommendations

RECOMMENDATION 1 _____ 8

The Committee recommends that, in order to further enhance and continuously improve the robustness of the evidence base for the development of future motorcycle safety policies and programs:

1. Transport for NSW includes ‘ongoing efforts to improve the quality of crash data’ as an action in its next three year motorcycle safety action plan,
2. NSW Police enhances its crash data collection methods; and
3. Transport for NSW, Road and Maritime Services (RMS) and the NSW Police evaluate the potential benefits of expanding the RMS Crash Mapping Project in order to enhance the understanding of causes of motorcycle crashes.

RECOMMENDATION 2 _____ 22

The Committee recommends that Transport for NSW commissions research into the role of alcohol and drugs in motorcycle crashes and strategies for deterring this risk-taking behaviour.

RECOMMENDATION 3 _____ 22

The Committee recommends that Transport for NSW distributes more widely information on recognising and adequately responding to early signs of rider fatigue, as presented on its *Ride to Live* website.

RECOMMENDATION 4 _____ 33

The Committee recommends that Transport for NSW and Road and Maritime Services work with local councils in developing a system to ensure that the *Making roads more motorcycle friendly – a Guide to Road Maintenance and Design* is implemented consistently across the State.

RECOMMENDATION 5 _____ 33

The Committee recommends that Transport for NSW and Roads and Maritime Services, in consultation with Local Government NSW, create and implement a robust and independent quality assurance and auditing process of all road designs to ensure that established best practice standards are implemented.

RECOMMENDATION 6 _____ 33

The Committee recommends that Transport for NSW and Roads and Maritime Services devise and implement policies and programs, based on the findings on underarm barrier systems, to make existing barriers less harmful in causing injury to motorcyclists.

RECOMMENDATION 7 _____ 34

The Committee recommends that Transport for NSW, Roads and Maritime Services and Local Government NSW develop a practical partnership strategy, which should include a schedule of regular meetings to resolve any road safety management issues, share innovative developments and develop solutions for safer roads across NSW.

RECOMMENDATION 8 _____ **34**

The Committee recommends that Transport for NSW and Roads and Maritime Services:

1. enhance their road environment incident and hazard reporting system to ensure that it is an integrated, user-friendly and responsive system, which uses the latest technology; and
2. investigate if the Shellharbour Council's *Report a Road Hazard* mobile phone application could be used as a model for the development of an improved hazard reporting system in NSW.

RECOMMENDATION 9 _____ **34**

The Committee recommends that Transport for NSW and Roads and Maritime Services consider including experienced motorcyclist expertise and/or use an instrumented motorcycle in road safety audits.

RECOMMENDATION 10 _____ **51**

The Committee recommends that Transport for NSW and Road and Maritime Services introduce a number of strategies to enhance driver skills and behaviour, including:

1. Revising the driver syllabus to incorporate training such as observation skills and abilities to recognise vulnerable road users such as motorcyclists; and
2. Introducing an element of qualified driver training as part of the initial licensing and training of drivers, potentially by mandating the 'Safer Drivers Course' and the related two-hour in-vehicle coaching session.

RECOMMENDATION 11 _____ **51**

The Committee recommends that Transport for NSW and the Centre for Road Safety consider implementing a second set of advertisements to raise awareness of the new lane filtering laws.

RECOMMENDATION 12 _____ **52**

The Committee recommends that Transport for NSW and Roads and Maritime Services examine options for providing long-term funding of the Local Government Road Safety Program.

RECOMMENDATION 13 _____ **68**

The Committee recommends that the State Insurance Regulatory Authority (SIRA) works with the insurance industry to examine insurance price signals, such as rebates on insurance, to increase the usage of protective clothing by motorcyclists and scooter riders.

RECOMMENDATION 14 _____ **68**

The Committee recommends that Transport for NSW works with experts, the rider community and the other relevant organisations involved in expediting the development of a star rating system, similar to the ANCAP model for cars, for protective clothing for motorcyclists.

RECOMMENDATION 15 _____ **68**

The Committee recommends that Transport for NSW works with experts to

1. expand the definition of an 'approved motorbike helmet' and ensure that those helmets can not only be legally used but also legally supplied in NSW, and

2. ensure that the 'approved motorbike helmet' bear a compliance marking to make it readily identifiable and to enable enforcement of the correct helmets by the Police.

RECOMMENDATION 16 _____ **69**

The Committee recommends that as part of its next Three Year Action Plan, Transport for NSW examines the effectiveness of mandatory use of daylight headlights and high-visibility clothing in Victoria and France.

RECOMMENDATION 17 _____ **82**

The Committee recommends that Transport for NSW and Roads and Maritime Services review the NSW Graduated Licensing Scheme for motorcyclists to take account of recent developments in other jurisdictions.

RECOMMENDATION 18 _____ **82**

The Committee recommends that Transport for NSW addresses the issue of unlicensed riding in NSW by

1. Establishing a profile of unlicensed riders, possibly via amnesty of unlicensed riders; and
2. Devising a strategy, based on that profile, to bring the unlicensed riders into the licensing system and to curb the occurrence of unlicensed riding.

RECOMMENDATION 19 _____ **82**

The Committee recommends that Transport for NSW and Roads and Maritime Services work with training providers, riders and motorcycle groups in developing and promoting a returning riders training course to ensure that all riders have most up-to-date knowledge and competencies required for riding in NSW.

RECOMMENDATION 20 _____ **82**

The Committee recommends that the State Insurance Regulatory Authority works with the insurance industry in developing a policy that would provide rebates on the NSW Compulsory Third Party insurance for mature aged riders who undertake a refresher post licensing course.

RECOMMENDATION 21 _____ **82**

The Committee recommends that Roads and Maritime Services introduces an adequate support system for riding instructors, trainers and contractors; and conducts regular compliance audits of and provides on-going professional development to motorcycle riding instructors.

RECOMMENDATION 22 _____ **83**

The Committee recommends that Road and Maritime Services works with training providers to ensure adequate availability and accessibility of rider training courses in metropolitan, regional and rural NSW.

Glossary

ABS	Anti-lock Braking Systems
ACCC	Australian Competition and Consumer Commission
ADAS	Advanced Driver Assistance Systems
AMC	Australian Motorcycle Council
ANCAP	Australasian New Car Assessment Program
SA/NZA	Standards Australia and Standards New Zealand
BAC	Blood Alcohol Concentration
BCR	Benefit-Cost Ratio
COPS	NSW Police Force Computerised Operational Policing System
CRASH	Consumer Rating and Assessment of Safe Helmets
CRS	Centre for Road Safety
CTP	Compulsory Third Party
DRLs	Daytime Running Lights
FCAI	Federal Chamber of Automotive Industries
GLS	Graduated Licensing Scheme
GPS	Global Positioning System
IPWEA (NSW)	Institute of Public Works Engineering Australasia Limited NSW division
ITS	Intelligent Transport Systems
JAS-ANZ	Joint Accreditation System of Australia and New Zealand
LGRSP	Local Government Road Safety Program
MAA	Motor Accident Authority
MAIDS	Motorcycle Accident In-Depth Study
MAW	Motorcycle Awareness Week
MCC of NSW	Motorcycle Council of NSW
MLC	Member of the Legislative Council
MP	Member of Parliament (Legislative Assembly)
NeuRA	Neuroscience Research Australia
NCAP	International New Car Assessment Program
NRMA	National Roads and Motorists' Association
NSWPF	New South Wales Police Force
RAC WA	The Royal Automobile Club of WA (Inc.)

JOINT STANDING COMMITTEE ON ROAD SAFETY

RACV	The Royal Automobile Club of Victoria
RIS	Regulation Impact Statement
RMS	Roads and Maritime Services
RSO	Road Safety Officers
RTA	Road and Traffic Authority
SIRA	State Insurance Regulatory Authority
STRA NSW	The Survive the Ride Association of NSW
TAC	Transport Accident Commission
TARS	Transport and Road Safety Research Centre
TMC	Transport Management Centre
UNECE	United Nations Economic Commission for Europe

Chapter One – Introduction

- 1.1 The Staysafe Committee commenced the *Inquiry into motorcycle safety in NSW* on 12 August 2015, following a referral from the Minister for Roads, Maritime and Freight, the Hon. Duncan Gay MLC.
- 1.2 The Minister made the referral in the context of the review of the first, and planning for the next, three year action plan of the *NSW Motorcycle Safety Strategy 2012-2021* (the Strategy). This is a ten year plan to make riding safer and reduce the risk, incidence and severity of a crash for all motorcyclists in NSW.
- 1.3 Staysafe was tasked to examine and report on trends of motorcycle usage, injury and fatality in NSW, crash and injury risk factors, the effectiveness of the current action plan to enhance motorcycle safety, strategies of other jurisdictions to improve motorcycle safety, licensing and rider training and any other related matters.

Conduct of the inquiry

- 1.4 The Committee called for submissions and issued a media release on 12 August 2015. It advertised the inquiry on the Parliament's website and by placing an advertisement in the *Australian Motorcycle News*. Media coverage of the inquiry included newspaper and television coverage on six occasions in the first week, five in the second week and one in the third week. The media reports covered both city and regional areas of New South Wales.
- 1.5 The Committee wrote to 39 key stakeholders including local and state government departments, research bodies, motorcycle organisations, rider training institutes, and medical and insurance organisations, inviting them to make a submission. The closing date for submissions was Wednesday, 9 September 2015.
- 1.6 In total, the Committee received 22 submissions from a broad range of stakeholders. A full list of the submissions received can be found in Appendix One. The submissions are available on the Committee's webpage: www.parliament.nsw.gov.au/staysafe.
- 1.7 As part of its inquiry, the Committee also held a public hearing on Monday, 12 October 2015 at Parliament House, Sydney. Sixteen witnesses provided evidence to the Committee. A list of the witnesses who appeared before the Committee can be found in Appendix Two.
- 1.8 The transcript of evidence from the hearing can be found on the Committee's web page: <http://www.parliament.nsw.gov.au/staysafe>.
- 1.9 The Committee thanks the organisations and individuals who participated in the inquiry by providing submissions and appearing at the Committee's hearing.

Chapter Two – Motorcycle usage, injury and fatality trends in NSW

- 2.1 This chapter examines motorcycle safety in NSW with reference to the inquiry's first term of reference, that of trends in motorcycle usage, injury and fatality.

TRENDS IMPELLING THE STRATEGY

- 2.2 The overrepresentation of motorcyclists in NSW road trauma was the key trigger for the development of the *NSW Motorcycle Safety Strategy 2012-2021*.
- 2.3 The Strategy noted continuing rise in the rate of motorcycle registrations and licences that were being issued in NSW. According to the 2010 figures, the number of motorcycle licences issued in NSW increased by 17 per cent (for the period from 2006 to 2010)¹ and registration of motorcycles increased by 41 per cent in comparison to 8 per cent for passenger vehicles.²
- 2.4 Coinciding with the increase in motorcycle riding popularity was an increase in motorcycle casualties in NSW. In fact, while motorcycles made up only 3.7 per cent of all vehicles registered in NSW,³ they accounted for ten per cent of injuries and 15 per cent of road fatalities.⁴ Evidently, motorcyclists were overrepresented in road trauma and riders were four times more likely to be involved in a fatal crash than passengers in other vehicles.⁵
- 2.5 The consideration of these trends was even more striking in the context of other road safety trends in NSW, and in particular the divergence in casualty trends for the different road user groups. It was noted that while the casualties had decreased by four per cent for all other road users since 2006, casualties for motorcyclists had increased by six per cent.⁶

TRENDS AT END OF THE FIRST 3 YEAR PLAN

- 2.6 According to Transport for NSW, 'the provisional results for 2014 show that the overrepresentations of motorcyclists in NSW road trauma' persists.⁷ Transport for NSW reported 60 deaths in 2014, indicating that motorcyclists account for almost 20 per cent of road fatalities. It further states that since 2000, 'the number of motorcyclist fatalities has remained relatively level at between 51 and 71 fatalities per year.'⁸

¹ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 – 2021*, p 7.

² Transport for NSW, *NSW Motorcycle Safety Strategy 2012 – 2021*, p 7.

³ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 – 2021*, p 7.

⁴ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 – 2021*, p 7.

⁵ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 – 2021*, p 8.

⁶ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 – 2021*, p 8.

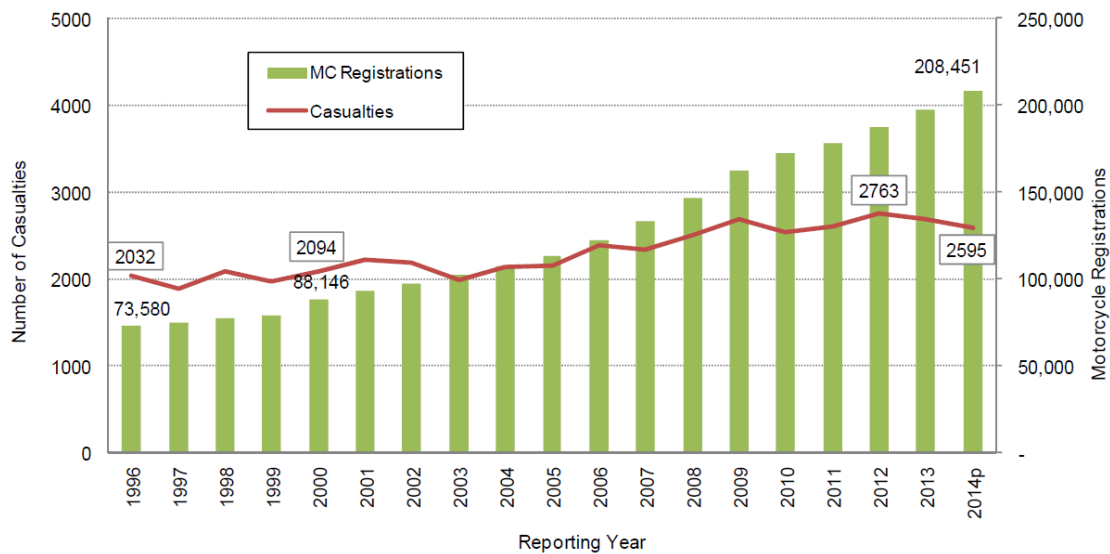
⁷ Submission 17, Transport for NSW, p. 4.

⁸ Submission 17, Transport for NSW, p. 6.

MOTORCYCLE SAFETY IN NSW
MOTORCYCLE USAGE, INJURY AND FATALITY TRENDS IN NSW

- 2.7 Yet, this contrasts with the trend for the overall number of fatalities, which has declined over this period.⁹ As a result, Transport for NSW outlines that ‘the percentage of the road toll comprising motorcyclists has been increasing – from eight per cent in 1997 to 21 per cent in 2013’.¹⁰
- 2.8 In relation to injuries, Transport for NSW reports that injuries were level until around 2003, but then steadily increased from 1, 936 in 2003 to 2,702 in 2012.¹¹ As with fatalities, ‘this trend also contrasts with the decreases in overall injury numbers experienced over the same period’. As a result, ‘the percentage of total injuries who were motorcyclists increased from 7 per cent in 2003 to 13 per cent in 2014’.¹²
- 2.9 Transport for NSW states that ‘the increase in motorcycle casualties, as discussed above, has coincided with the increased popularity of motorcycling, which is reflected in motorcycle registrations’. Since 2000, Transport for NSW noted an increase in motorcycle registrations by 136 per cent: from 88,146 in 2000 to 208,451 in 2014.¹³ This increase in popularity of motorcycling has been significantly greater than the increase for other vehicle registrations.

Figure 1 - Motorcycle Casualties and Registrations, 1996 to 2014¹⁴

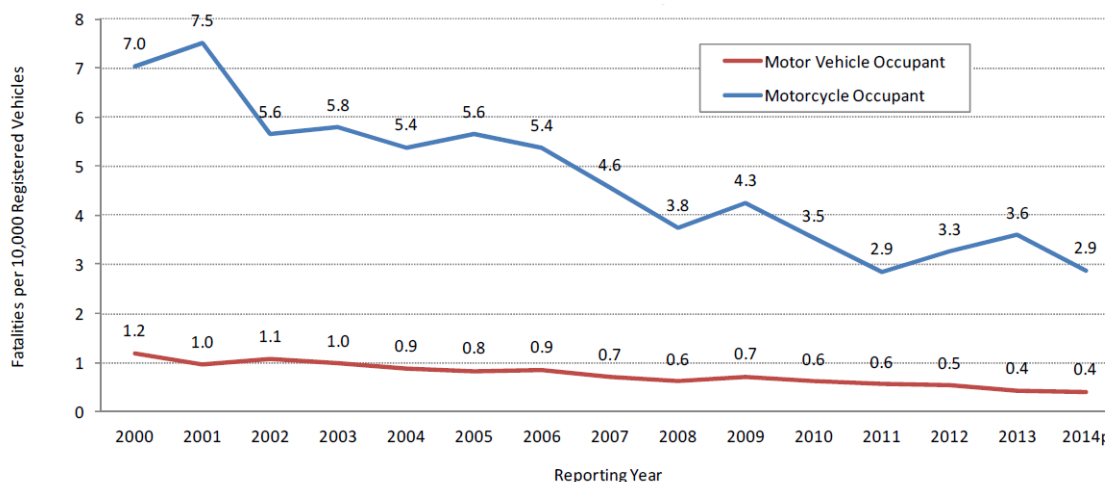


⁹ Submission 17, Transport for NSW, p. 6.
¹⁰ Submission 17, Transport for NSW, p. 6.
¹¹ Submission 17, Transport for NSW, p. 7.
¹² Submission 17, Transport for NSW, p. 7.
¹³ Submission 17, Transport for NSW, p. 4.
¹⁴ Submission 17, Transport for NSW, p. 4.

Fatality rate trends

2.10 Transport for NSW notes that while the fatality rate is significantly higher for motorcyclists when compared to other motor vehicles, the overall rate of fatality has been decreasing in line with other motor vehicles.¹⁵ Despite this, Transport for NSW also emphasised that the fatality risk per registered vehicle for a motorcyclist remains around seven times that for an occupant of a motor vehicle'.¹⁶

Figure 2 -Fatalities per 10,000 Registered Vehicles, NSW, Motorcyclists v Other Motor Vehicle Occupants 2000 to 2014¹⁷



2.11 A number of inquiry participants have cautioned against the use of fatality numbers as the primary basis for policy making in this area.¹⁸ Instead, they have advocated the use of ‘fatalities/injuries (i.e. casualties) per 10,000 registrations as the most adequate metrics to capture progress in safety of motorcycling.’¹⁹

2.12 For instance, Dr Elizabeth de Rome, Senior Research Officer, Neuroscience Research Australia and NSW Chapter Committee member of the Australasian College of Road Safety stressed the need to monitor the ‘relative risk of motorcycling’. She explained that to determine the relativity of the risk of motorcycling over time, the greater ‘usage of crash rates per 10,000 registered vehicles rather than numbers’ would be more accurate and therefore more desirable.²⁰

¹⁵ Submission 17, Transport for NSW, p. 8.

¹⁶ Submission 17, Transport for NSW, p. 8.

¹⁷ Submission 17, Transport for NSW, p. 8.

¹⁸ Submission 4, Shooters and Fishers Party NSW Motorcycle Branch, p. 2; Submission 8, Federal Chamber of Automotive Industries, p.4 and Appendix 1; Submission 10, National Motorcycle Alliance, p. 4; Submission 15, Motorcycle Council of NSW Inc., pp. 3-6;

¹⁹ Submission 12, NSW Chapter of the Australasian College of Road Safety, p. 2.

²⁰ Dr Elizabeth de Rome, Senior Research Officer, Neuroscience Research Australia and NSW Chapter Committee member of the Australasian College of Road Safety, Transcript of evidence, 12 October 2015, p. 14.

DATA QUALITY & CRASH ANALYSIS

Data quality

- 2.13 A theme that was raised as part of the examination of trends is quality of data. In fact, one of the broader road safety initiatives under the *NSW Motorcycle Safety Strategy 2012-2021* is improved crash data.²¹
- 2.14 The Centre for Road Safety (CRS), under the auspice of Transport for NSW collates and provides NSW road crash statistics, using data from the NSW Police Force Computerised Operational Policing System (COPS). Its crash database, CrashLink, is used for road safety analysis and research work, strategic planning and policy work.²²
- 2.15 Throughout the inquiry, the Committee has received evidence indicating that there is ongoing concern about the adequacy of crash data. Issues identified include: lack of data about the severity of injury crashes; insufficient detail about the location of crashes; the unreliability of the reporting of off-road crashes or those less serious crashes which do not require police to be in attendance; and the accuracy of data in relation to identifying speed as the primary causative factor.²³
- 2.16 For instance, the Institute of Public Works Engineering Australasia Limited (IPWEA) NSW Division has noted that the concerns, which it previously raised with the Staysafe Committee regarding the collection, timeliness and usability of crash data, remain.²⁴ According to the IPWEA (NSW), 'these deficiencies continue to inhibit the ability of councils and policy makers to make informed decisions and to develop appropriate road safety strategies'.²⁵
- 2.17 Furthermore, the reliability of data on speed has been questioned by the Motorcycle Council of NSW Inc.²⁶ Yet, while Transport for NSW has stated that according to its data, speeding continues to be the leading crash risk for motorcyclists, it has done so with the caveat that the role of speeding in motorcycle crashes may be overestimated (*see discussion in Chapter Three*).
- 2.18 Professors Ann Williamson and Raphael Grzebieta of the Transport and Road Safety Research Centre (TARS) at the University of New South Wales, have also expressed concern to the Committee with regard to gaps in CrashLink data, (linked police-reported and hospital data). In particular, they raised concerns in

²¹ *NSW Motorcycle Safety Strategy 2012-2021*, Context, p. 11.

²² Submission 14, Institute of Public Works Engineering Australasia Limited (IPWEA) NSW Division, p. 9.

²³ Submission 8, Federated Chamber of Automotive Industries (FCAI), p. 9; Submission 11, Survive the Ride Association of NSW (STRA NSW), p. 3; Submission 13, National Motorists Association of Australia (NMAA), p. 2; Submission 14, Institute of Public Works Engineering Australasia Limited (IPWEA) NSW Division, pp. 6, 9, 10, 13, 15, 24; Submission 15, Motorcycle Council of NSW Inc., p. 11;

²⁴ Joint Standing Committee on Road Safety, *Report on Pedestrian Safety*, Report No 3/54, New South Wales Parliament, December 2009.

²⁵ Submission 14, Institute of Public Works Engineering Australasia Limited (IPWEA) NSW Division. p. 9.

²⁶ Submission 15, Motorcycle Council of NSW Inc., p. 9.

relation to capturing details of fatalities and single vehicle crashes which are not reported to Police.²⁷

- 2.19 In its submission to the inquiry, Transport for NSW outlined that it has been working towards improving the quality of crash data. In fact, since 2013, CRS has undertaken a project to link police reported crash data with hospital admissions and emergency department presentations derived from NSW health data.²⁸ This data has enabled Transport for NSW to identify new serious injury data and fatality trends for motorcycle related crashes from 2005 to 2013.²⁹

Crash analysis

- 2.20 A number of submissions have also raised the issue of inadequate crash analysis in NSW, which leads to misleading data and inadequate road safety policies.³⁰
- 2.21 The NSW Police Force examines fatality and serious injury data to determine Local Area Command crash risk profiles.³¹ Police also monitor data recorded in the NSW Police Force COPS database to determine whether enforcement activities in relation to speed and other risk taking behaviours are meeting the objectives of the Motorcycle Safety Strategy.³²
- 2.22 Yet, Mr Christopher Burns, representing the Motorcycle Council of NSW Inc., told the Committee that crashes are often attributed to speed with little or no investigation.³³ Mr Guy Stanford, Chair, Helmets Committee, Motorcycle Council of NSW Inc., added that only 17 per cent of motorcycle deaths are investigated while the remainder are attributed to speeding.³⁴
- 2.23 Nevertheless, the Motorcycle Council has also commended a project currently being undertaken by the Roads and Maritime Services (RMS) which is mapping crash zones for motorcycle incidents and areas of concern by using local knowledge of riders.³⁵ Their submission recommends expanding the program, with a view to increasing the knowledge base relating to motorcycle crashes and to gaining a better understanding of crash causation.³⁶

²⁷ Professor Ann Williamson, Professor & Director, Transport and Road Safety Research Centre, UNSW, Transcript of evidence, 12 October 2015, p. 52 and Professor Raphael Grzebieta, Professor of Road Safety, Transport and Road Safety Research Centre, UNSW, Transcript of evidence, 12 October 2015, p. 53.

²⁸ Submission 17, Transport for NSW, p. 24.

²⁹ Submission 17, Transport for NSW, p. 91.

³⁰ Submission 6, Ms Fiona Field, p. 1; Submission 15, Motorcycle Council of NSW Inc., pp. 9-13; Submission 13, National Motorist Association of Australia, p. 2 and Attachment 1.

³¹ Submission 17, Transport for NSW, p. 67.

³² Submission 17, Transport for NSW, p. 61.

³³ Mr Christopher Burns, Vice-Chairman, Motorcycle Council of NSW Inc., Transcript of evidence, 12 October 2015, p. 39.

³⁴ Mr Guy Stanford, Chair, Helmets Committee, Motorcycle Council of NSW Inc., Transcript of evidence, 12 October 2015, p. 45.

³⁵ Submission 15, Motorcycle Council of NSW Inc., p. 13.

³⁶ Submission 15, Motorcycle Council of NSW Inc., p. 25.

Conclusions

- 2.24 The Committee notes that while there is an encouraging picture emerging with respect to the casualties per 10,000 registration trend, the persistently high number of motorcycle fatalities is a concern.
- 2.25 The Committee considers that while the higher fatality risk per registered vehicle for a motorcyclist than for an occupant of a motor vehicle is also concerning, there are number of inherent vulnerabilities in the very nature of the motorcycle design (*see discussion in Chapter Three*) which need to be considered in this context.
- 2.26 Overall, the Committee believes that the trends present a case for a renewed and elevated effort in the form of a new set of actions to improve safety for motorcyclists and other road users in NSW. These are examined in the other chapters of this report.
- 2.27 In relation to quality of data, the Committee agrees that having in place an adequate crash data collection and dissemination system is critical in developing appropriate road safety strategies. An aspect of this discussion, which relates to incident reporting, is captured in Chapter Four.
- 2.28 The Committee considers that Transport for NSW has made it clear that although it is working towards improved quality of data, including that on speed, it is aware of some limitations of data. In particular, Transport for NSW, advised that, due to methods of motorcycle crash data collection, speeding as a compounding crash factor may be overestimated in its data (*discussed in Chapter Three*).³⁷
- 2.29 The Committee notes that the CRS project to link police reported crash data with hospital admissions and emergency department presentations derived from NSW health data is admirable and a step in the right direction. The Committee believes that this will alleviate some concerns of stakeholders who stressed the importance of reliable data in policy formulation and program design. Nevertheless, the Committee considers that the efforts to improve the quality of crash data should be ongoing and should be reflected in the next three year action plan.
- 2.30 In relation to crash analysis, the Committee notes the recurring evidence which suggests that increased resources are required to improve crash analysis practices by the Police.
- 2.31 The Committee is pleased that the Roads and Maritime Services is mapping crash zones for motorcycle incidents and areas of concern by using local knowledge of riders and that this will improve the understanding of crash causation.
- 2.32 This Committee has repeatedly called for improvements in crash analysis and emphasised the impact this has on the quality of data and the road safety policies. In its 2014 Report on Speed Zoning and its Impact on the Demerit Point Scheme, Staysafe made a number of recommendations (recommendations 1-6)

³⁷ Submission 17, Transport for NSW, p. 22.

that relate to improving the quality of crash data collection and analysis. In light of the concerns raised as part of this inquiry, the Committee reiterates those recommendations.³⁸

- 2.33 The additional data inadequacies raised in the current inquiry again highlight the need for priority to be given to a comprehensive review of data quality and the method of its collection and analysis to underpin future initiatives and actions implementing the NSW Motorcycle Safety Strategy. As it has done previously, the Committee recommends further interagency and stakeholder consultation as part of the process of reviewing and reforming the system of data collection and analysis to enable accurate identification and analysis of the causes of motorcycle crashes and of serious injuries.

RECOMMENDATION 1

The Committee recommends that, in order to further enhance and continuously improve the robustness of the evidence base for the development of future motorcycle safety policies and programs:

- 1. Transport for NSW includes 'ongoing efforts to improve the quality of crash data' as an action in its next three year motorcycle safety action plan,**
- 2. NSW Police enhances its crash data collection methods; and**
- 3. Transport for NSW, Road and Maritime Services (RMS) and the NSW Police evaluate the potential benefits of expanding the RMS Crash Mapping Project in order to enhance the understanding of causes of motorcycle crashes.**

³⁸ Joint Standing Committee on Road Safety, *Inquiry Speed Zoning and its Impact on the Demerit Point Scheme*, Report No 4/55, November 2014, pp. 8-20.

Chapter Three – Crash and injury risk factors

- 3.1 This chapter examines motorcycle safety in New South Wales with particular reference to the inquiry's second term of reference which covers the subject of crash and injury risk factors.
- 3.2 In particular, this chapter examines the following risk factors for motorcyclists: speeding; alcohol and other drug use; fatigue; rider age, experience and manoeuvre; unlicensed riding; low conspicuity; the behaviour of motorcyclists and other road users; inherent vulnerabilities and roads and road environmental factors.

SPEEDING

- 3.3 Speeding is defined as 'riding at excessive speed and not riding at a speed suitable to the prevailing road conditions (for example on curves or wet roads)'.³⁹
- 3.4 Generally, higher speeds provide less time to respond to a hazardous situation and increase the probability of a serious injury or even death. Due to minimal physical protection and the likelihood of being thrown off the vehicle, the risks for motorcyclists in speed-related crashes are particularly high.⁴⁰
- 3.5 According to Transport for NSW, speeding continues to be the dominant contributing factor in motorcycle fatalities and serious injuries. In fact, speeding is a compounding factor in more than 50 per cent of fatal crashes and 25 per cent of serious injury crashes.⁴¹
- 3.6 Yet, in their submission to the inquiry, Transport for NSW noted that the criteria used to identify speed involvement may overestimate the role of speed in motorcycle crashes, compared with other vehicle types:
- For example, speed is flagged when a vehicle skids, slides or loses control (excluding certain triggering conditions) – a two wheeled motorcycle is more likely to experience this than a vehicle with four wheels and more stability.⁴²
- 3.7 The role of speed in motorcycle crashes has been questioned by a number of inquiry participants. They stated that the reported role of speed in motorcycle crashes is questionable due to 'lack of adequate crash investigation'.⁴³

³⁹ Transport for NSW, NSW Motorcycle Safety Strategy 2012 – 2021, p. 19.

⁴⁰ Transport for NSW, NSW Motorcycle Safety Strategy 2012 – 2021, p. 17.

⁴¹ Mr Bernard Carlon, Acting Executive Director, Centre for Road Safety, Transport for NSW, Transcript of evidence, 12 October 2015, p. 2.

⁴² Submission 17, Transport for NSW, p. 22.

⁴³ Mr Christopher Burns, Vice-Chairman, Motorcycle Council of NSW Inc. Transcript of evidence, 12 October 2015, p. 39.

Attitudes towards speeding

- 3.8 Higher rates of speed-related motorcyclist fatalities, relative to motor vehicle fatalities, are a cause for concern in NSW and many other jurisdictions.⁴⁴
- 3.9 Transport for NSW's submission provided results from a recent Motorcycle Attitudinal Quantitative Research Study. The sample of representative motorcyclists found that
- (1) 40 per cent of riders admitted exceeding the speed limit on the open road and when they have good visibility;
 - (2) 61 per cent of riders acknowledged riding faster than the speed limit during part of their riding time; and
 - (3) 61 per cent of riders believe there is 'no such thing as safe speeding' compared to 73 per cent of drivers.⁴⁵
- 3.10 But, according to the Institute of Public Works Engineering Australasia Limited (IPWEA) NSW Division, the number of motorcyclists who claim to 'never' speed (24 per cent) is a lot higher than the general population (14 per cent).⁴⁶

ALCOHOL AND OTHER DRUG USE

- 3.11 Alcohol – after speeding – is the second highest contributing factor to motorcycle fatalities.⁴⁷
- 3.12 Given the skills and higher physical demands required when riding a bike including balance, coordination, judgement and vehicle control, motorcyclists are more vulnerable than car drivers while under the influence of alcohol and drugs.⁴⁸ According to the Transport and Road Safety Research Centre (TARS), the risk of fatality for a motorcyclist with a blood alcohol concentration (BAC) reading of 0.05 was 165 times higher than for a car or a van driver.⁴⁹
- 3.13 Transport for NSW suggested that the majority of motorcycle riders in NSW are aware of the risks and refrain from riding while under the influence of alcohol :
- The large majority (88%) of NSW riders in the NSW 'point prevalence study'⁵⁰ reported that they never ride when they suspect they are over the legal limit for alcohol.⁵¹
- 3.14 The most recent figures (2014) show that BAC over the legal limit, i.e. over 0.05 per cent, was a compounding factor in 17 per cent of motorcycle fatalities.⁵²

⁴⁴ Submission 17, Transport for NSW, p. 53.

⁴⁵ Submission 17, Transport for NSW, pp. 53 - 54.

⁴⁶ Submission 14, Institute of Public Works Engineering Australasia Limited (IPWEA) NSW Division, p. 17.

⁴⁷ Submission 17, Transport for NSW, p. 54.

⁴⁸ Submission 17, Transport for NSW, p. 54.

⁴⁹ Submission 22, Transport and Road Safety Research Centre (TARS), University of New South Wales, p. 10.

⁵⁰ Neuroscience Research Australia (2013) *Motorcycle & Scooter Riders in NSW: A Rider Profile. Prepared for the Centre for Road Safety*, NSW Department for Transport.

⁵¹ Submission 17, Transport for NSW, p. 54.

While alcohol is a greater contributing factor to motorcycle fatalities than for other road fatalities (which was at 14 per cent in 2014), it has decreased from 20 per cent, which was the figure ten years ago.⁵³

- 3.15 Mr Bernard Carlon, Acting Executive Director, Centre for Road Safety, attributes the declining role of alcohol in motorcycle crashes to the efforts of the NSW Police and 'Plan B', an educational campaign targeting all motorists.⁵⁴
- 3.16 Yet, Assistant Commissioner John Hartley, Commander Traffic and Highway Patrol Command, NSW Police Force, advised that more research was required to determine other contributing factors such as fatigue, which may have compounding effects on people who may still be within the legal BAC levels.⁵⁵
- 3.17 The suggestion to reduce the legal limit to 0.02 per cent for BAC was raised by the Transport and Road Safety Research Centre (TARS), University of New South Wales (TARS). This BAC limit is currently used in Sweden, which, is, according to TARS, 'the world's best practice country for road safety'.⁵⁶
- 3.18 Yet, Professor Grzebieta, Professor of Road Safety at TARS, informed the Committee that the BAC level restriction of 0.02 per cent, as applied in Sweden, was not working there. He said that this was because: 'Half of the fatalities are alcohol associated, drug associated, speed associated'.⁵⁷
- 3.19 Mr David Cooke, General Manager, National Motorcycle Alliance noted that there is insufficient evidence that any reductions in BAC levels would have an impact.⁵⁸ According to Dr Elizabeth de Rome, Senior Research Officer, Neuroscience Research Australia and witness for the NSW Chapter of the Australasian College of Road Safety, changing the BAC limit would not have a desirable impact. Instead, she emphasised the need to target unlicensed riders who are engaging in unlawful and dangerous riding practices.⁵⁹
- 3.20 Commenting on initiatives to further reduce the role of alcohol in motorcycle crashes, Professor Grzebieta suggested that an alcohol interlock be made mandatory for all motorcycles to prevent riders being able to operate their bikes while under the influence.⁶⁰
- 3.21 While the *NSW Motorcycle Safety Strategy 2012 - 2021* identified the role of drugs in motorcycle fatalities and accidents as a field for further investigation, the

⁵² Mr Bernard Carlon, Acting Executive Director, Centre for Road Safety, Transport for NSW, Transcript of evidence, 12 October 2015, p. 4.

⁵³ Mr Carlon, Evidence, 12 October 2015, p. 4.

⁵⁴ Mr Carlon, Evidence, 12 October 2015, p. 4.

⁵⁵ Assistant Commissioner John Hartley, Commander Traffic and Highway Patrol Command, NSW Police Force, Transcript of evidence, 12 October 2015, p. 4.

⁵⁶ Submission 22, Transport and Road Safety Research Centre (TARS), University of New South Wales, p. 11.

⁵⁷ Professor Raphael Grzebieta, Professor of Road Safety, Transport and Road Safety Research Centre (TARS), University of New South Wales, Transcript of evidence, 12 October 2015, p. 51.

⁵⁸ Mr David Cooke, General Manager, National Motorcycle Alliance, Transcript of evidence, 12 October 2015, p. 35.

⁵⁹ Dr Elizabeth de Rome, Senior Research Officer, Neuroscience Research Australia and NSW Chapter Committee member, Australasian College of Road Safety, Transcript of evidence, 12 October 2015, p. 18.

⁶⁰ Professor Grzebieta, Evidence, 12 October 2015, p. 50.

Committee has not received any additional evidence on this aspect.⁶¹ Nevertheless, TARS conducted a retrospective study of fatalities between 2001 and 2006. In it, they identified illicit drugs as a contributing factor for 207 motorcyclists (27 per cent). In addition, 102 motorcyclists (13 per cent) used more than one type of illicit drug and 81 motorcyclists used illicit drugs and alcohol (11 per cent).⁶²

FATIGUE

- 3.1 Along with speeding and alcohol, rider fatigue continues to be one of the leading causes of motorcycle crashes. Transport for NSW states that fatigue is a factor in approximately seven per cent of fatal crashes and six per cent of injury crashes.⁶³
- 3.2 In its First Three Years Action Plan, Transport for NSW set out to undertake a literature review into fatigue as it relates to motorcycles.⁶⁴ In its submission to the inquiry, Transport for NSW reported that in 2013 the Centre for Road Safety commissioned research into rider fatigue.⁶⁵ The key finding was that existing research focused on understanding driver fatigue, but little was known about the specifics of rider fatigue.⁶⁶ Consequently, given that riding is believed to require greater cognitive/perceptual demands than driving, Transport for NSW stated that further research is warranted to investigate to what extent greater cognitive/perceptual demands of riding manifest in rider fatigue.⁶⁷
- 3.3 The significance of rider fatigue as a crash risk was also examined as a component of an in-depth motorcycle crash study conducted by Neuroscience Research Australia (NeuRA) on behalf of the Austroads Research Board and managed by the Centre for Road Safety. This study concluded that rider fatigue was a contributing factor in crashes, typically those involving cornering errors and riders misjudging turns. The study further observed that these types of crashes commonly occurred in the latter half of long rides in rural areas and where there had been a change in rhythm in riding after a break, or in moving from rural areas to more urban areas. The study recommended the need to remind riders of the importance of taking breaks during long rides.⁶⁸
- 3.4 While the Transport and Road Safety Research Centre (TARS) at the University of New South Wales stated that it welcomed further studies researching the effects of fatigue on motorcyclists, it noted that it has already carried out a major study into the effects of fatigue on drivers.⁶⁹ It further stated that 'fatigue is a phenomena that everyone knows' and that 'everyone knows what causes fatigue'.⁷⁰ TARS also noted that 'countermeasures for fatigue typically rely on

⁶¹ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 – 2021*, p. 16.

⁶² Submission 22, Transport and Road Safety Research Centre (TARS), University of New South Wales, p. 9.

⁶³ Submission 17, Transport for NSW, p. 22.

⁶⁴ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 – 2021*, p. 17.

⁶⁵ Submission 17, Transport for NSW, p. 53.

⁶⁶ Submission 17, Transport for NSW, p. 55.

⁶⁷ Submission 17, Transport for NSW, p. 55.

⁶⁸ Transport for NSW, Centre for Road Safety, Answers to Questions taken on Notice, 2 November 2015, pp. 10-11.

⁶⁹ Submission 22, Transport and Road Safety Research Centre (TARS), University of New South Wales, p. 14.

⁷⁰ Submission 22, Transport and Road Safety Research Centre (TARS), University of New South Wales, p. 14.

increasing awareness or education about the symptoms and causes of fatigue'. Instead, TARS suggested that safety messages about fatigue should be 'encouraging people to respond to early signs of fatigue by taking action to reduce it'.⁷¹ One of its current research projects, TARS stated, is to examine the factors that might 'motivate people to respond to signs of fatigue and sleepiness'.⁷²

RIDER AGE, INEXPERIENCE AND RIDING MANOEUVRES

3.5 In its *Motorcycle Safety Strategy 2012-2021*, Transport for NSW identified rider age, inexperience and riding manoeuvres as factors in motorcycle crashes.

Rider Age

3.6 In the Strategy, Transport for NSW stated that young riders (those under 30 years of age)⁷³ are over-represented in crash statistics.⁷⁴ Younger age and inexperience increases the crash risk among drivers and motorcyclists. Importantly, these risk factors appear to be more significant for riders. According to international research⁷⁵ on motorcyclists, youth is a more significant crash contributor than inexperience.⁷⁶

3.7 Although the older riders make up the greater proportion of motorcycle crashes in NSW, based on the crash rate relative to licences on issue, younger riders have a higher crash rate. In fact, young motorcyclists represent only 11 per cent of licence holders and account for 40 per cent of rider casualties, while older riders (those aged between 30-49 years) represent 47 per cent of rider licences on issue and account for 41 per cent of rider casualties (and those aged 50 years and older represent 42 per cent of licences and account for 16 per cent of casualties).⁷⁷

Inexperience and riding abilities

3.8 The Strategy also identified inexperience as a major factor in motorcycle crashes.⁷⁸ For instance, inexperienced riders are more likely to misjudge the correct speed for road conditions.⁷⁹ Furthermore, rider inexperience was also considered a factor in crashes due to rider error that involved cornering and braking.⁸⁰

3.9 In its submission, Transport for NSW cited the Motorcycle Attitudinal Quantitative Research Study, commissioned by the Centre for Road Safety in 2012, according to which 20 per cent of riders agreed that they ride outside of

⁷¹ Submission 22, Transport and Road Safety Research Centre (TARS), University of New South Wales, pp. 16-17.

⁷² Submission 22, Transport and Road Safety Research Centre (TARS), University of New South Wales, p. 17.

⁷³ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 – 2021*, p. 17.

⁷⁴ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 – 2021*, p. 17.

⁷⁵ Austroads (2014), *A Discussion Paper on Elements of Graduated Licensing Systems for Motorcycle Riders*. A Research Report AP-R469-14. Austroads, Sydney, NSW.

⁷⁶ Submission 17, Transport for NSW, p 57.

⁷⁷ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 – 2021*, p. 17.

⁷⁸ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 – 2021*, p. 17.

⁷⁹ Submission 17, Transport for NSW, p. 54.

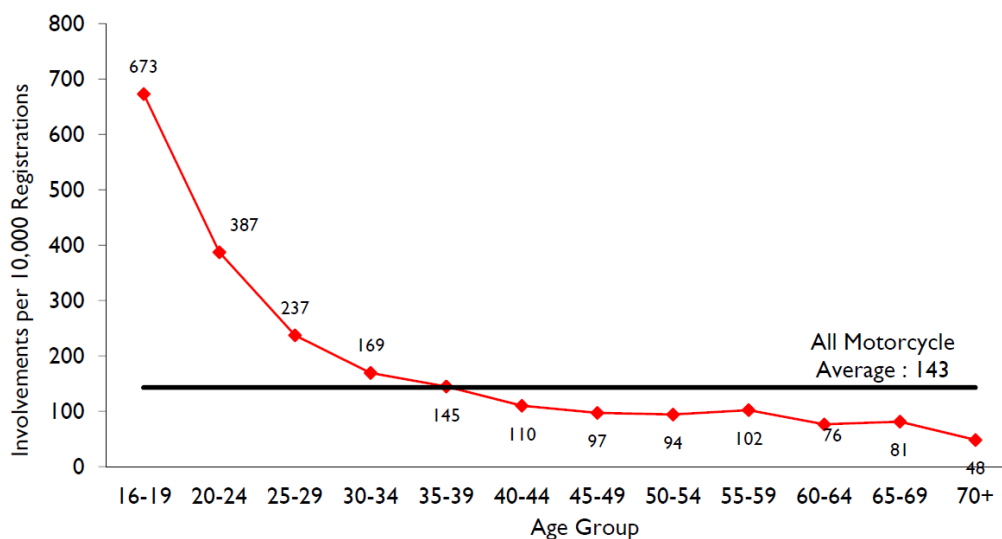
⁸⁰ Submission 17, Transport for NSW, p. 56.

their ability.⁸¹ An even more recent 2015 crash study identified that inappropriate speed, braking errors, cornering errors, travelling too close and poor technique were some of the rider manoeuvres that frequently contributed to serious crashes.⁸²

Rider age versus inexperience

3.10 Comparing rider age versus inexperience as a crash risk, Transport for NSW stated that international research supports their statistics that youth contributes considerably more to motorcycle crashes than inexperience (see graph below).⁸³

Figure 3 - Motorcycle Crash Involvements per 10,000 Registered Motorcycles, Licensed Riders Only, Age of Rider Involvement x Motorcycles Registered by Owner Age Group, 2007



Returning/Infrequent Riders

3.11 During the development of the Motorcycle Safety Strategy, Transport for NSW also identified concerns about riders with 'dormant licences' or who do not have recent motorcycle riding experience, i.e. returning riders, as a potential safety issue. It therefore stated that, as part of its First Three Years Action Plan, it would 'investigate the issue of returning riders'.⁸⁴

3.12 In its submission to the inquiry, Transport for NSW reported that the Centre for Road Safety reviewed the literature on returning riders.⁸⁵ According to the literature review, there are two factors which have been identified as contributing to a greater crash risk among returning riders:

- (1) Deterioration in motorcycle handling skills, which results from lack of practice; and

⁸¹ Submission 17, Transport for NSW, p. 54.

⁸² Submission 17, Transport for NSW, p. 54.

⁸³ Submission 17, Transport for NSW, p. 57.

⁸⁴ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 – 2021*, pp. 17-18.

⁸⁵ Submission 17, Transport for NSW, p. 54.

(2) Unfamiliarity with the motorcycle, resulting from changes in motorcycle design and performance over time.⁸⁶

3.13 Transport for NSW added that infrequent riders potentially face the same risks and that therefore, the general issue of unfamiliarity may be more important than 'whether a rider is a returning rider or not'.⁸⁷

3.14 A number of submissions to the inquiry have noted that, based on anecdotal evidence, the issue of 'returning riders' and the associated risks are significant and would need to be addressed.⁸⁸ Issues included the physical demands required to ride a motorcycle,⁸⁹ together with loss of fitness, mobility, perception and reaction time, as well as rider age.⁹⁰ The purchase of high performance machines by middle aged riders who may not have the required skills was also raised as an issue.⁹¹

UNLICENSED RIDING

3.15 The Motorcycle Safety Strategy identified unlicensed riding, which includes riders who were never licenced or who had their licence suspended, cancelled or not renewed, as a crash risk factor. It reported that one in every five riders killed and one in every 14 riders injured was 'unauthorised to ride a motorcycle' due to being unlicensed, suspended, disqualified, cancelled or expired.⁹²

3.16 In its submission to the inquiry, Transport for NSW stated that:

(1) Unlicensed motorcycle riding appears more widespread than unlicensed driving.

(2) The crash risk is three times higher for unlicensed riders compared to licensed riders.⁹³

(3) A significant proportion – 17 per cent – of riders involved in fatal crashes is not authorised.⁹⁴

3.17 NSW Police advised the Committee that approximately '60,000 drivers and riders are caught unauthorised in New South Wales'.⁹⁵

3.18 Several other submissions to the inquiry identified 'unlicensed riding as a significant risk'. According to the Motorcycle Council of NSW Inc.:

⁸⁶ Submission 17, Transport for NSW, p. 54.

⁸⁷ Submission 17, Transport for NSW, p. 54.

⁸⁸ Submission 10, National Motorcycle Alliance, p. 4; Submission 13, National Motorists Association of Australia, p. 2; Submission 14, Institute of Public Works Engineering Australia (IPWEA) NSW Division, p. 23; and Submission 18, Stay Upright Rider Training, p. 4.

⁸⁹ Mr Carlon, Evidence, 12 October 2015, p. 12.

⁹⁰ Mr Carlon, Evidence, 12 October 2015, p. 12; and Submission 7, Mr Peter Lenaghan, p. 1.

⁹¹ Submission 7, Mr Peter Lenaghan, p. 1.

⁹² Transport for NSW, *NSW Motorcycle Safety Strategy 2012 -2021*, p. 17.

⁹³ Submission 17, Transport for NSW, p. 56.

⁹⁴ Submission 17, Transport for NSW, p. 23.

⁹⁵ Assistant Commissioner Hartley, Evidence, 12 October 2015, p. 12.

- (1) Unlicensed riders are more likely to be at fault in intersection crashes with another vehicle (50 per cent compared to fully licenced riders at 25 per cent).⁹⁶ In non-intersection crashes, the rate rises to 67 per cent.⁹⁷
- (2) Unlicensed riders make up ten per cent of all riders involved in speed-related crashes. Unlicensed riders (31 per cent) were more likely to have a speed related crash than licenced riders (23 per cent).⁹⁸

3.19 Furthermore, the Motorcycle Council of NSW noted that unlicensed riders account for 27 per cent of riders in crashes with illegal BAC,⁹⁹ while the NSW Chapter of the Australasian College of Road Safety provided a figure of 35 per cent.¹⁰⁰ Dr Elizabeth de Rome, representing the NSW Chapter of the Australasian College of Road Safety, told the Committee that she places unlicensed riders and alcohol together and that so much of riding under the influence of alcohol comes from unlicensed riders. Overall, she stated, unlicensed riders are much more likely to engage in risky behaviour and dangerous riding practices.¹⁰¹

Risks to Pillion Passengers

3.20 Other issues, which are related to unlicensed riding and have been addressed in submissions to the inquiry include young age, risk to pillion passengers and non-compliance with mandatory wearing of helmets:

- (1) 52 per cent of unlicensed riders who died were under 26 years of age.¹⁰²
- (2) Pillion passengers are more likely to be injured in an accident when riding with an unlicensed rider (six per cent), in comparison to a licenced rider (four per cent).¹⁰³ Pillion casualties on motorcycles ridden by an unlicensed rider comprise 11 per cent of total pillion casualties.¹⁰⁴
- (3) Pillion riders are also less likely to be wearing a helmet when riding with an unlicensed rider (38 per cent compared to two per cent with licenced riders).¹⁰⁵ The majority of pillion casualties (53 per cent) not wearing a helmet were with non-licenced riders.¹⁰⁶
- (4) Unlicensed riders account for 59 per cent all rider casualties who were not wearing a helmet.¹⁰⁷

⁹⁶ Submission 15, Motorcycle Council of NSW Inc., p. 31.

⁹⁷ Submission 15, Motorcycle Council of NSW Inc., p. 31.

⁹⁸ Submission 15, Motorcycle Council of NSW Inc., p. 37.

⁹⁹ Submission 15, Motorcycle Council of NSW Inc., p. 36.

¹⁰⁰ Submission 12, NSW Chapter of the Australasian College of Road Safety, p. 5.

¹⁰¹ Dr de Rome, Evidence, 12 October 2015, p. 18.

¹⁰² Submission 15, Motorcycle Council of NSW Inc., p. 37.

¹⁰³ Submission 12, NSW Chapter of the Australasian College of Road Safety, p. 5.

¹⁰⁴ Submission 15, Motorcycle Council of NSW Inc., p. 37.

¹⁰⁵ Submission 15, Motorcycle Council of NSW Inc., p. 37.

¹⁰⁶ Submission 15, Motorcycle Council of NSW Inc., p. 37.

¹⁰⁷ Submission 15, Motorcycle Council of NSW Inc., p. 37.

- 3.21 Dr de Rome concluded that the focus on unlicensed riders is essential and has not happened to date as it needs to.¹⁰⁸

LOW CONSPICUITY

- 3.22 Conspicuity refers to motorcycle and rider visibility. The low conspicuity of motorcycles relative to other motor vehicles places riders at greater risk of crash involvement.¹⁰⁹
- 3.23 According to a 2012 NSW attitudinal survey, which was commissioned by the Centre for Road Safety and referred to in the Transport for NSW' submission to the inquiry, 'drivers who have been involved in a crash with a motorcyclist were most likely to consider that their crash was due to not seeing the motorcycle (30 per cent) and the inattention of the motorcyclist (28 per cent)'.¹¹⁰
- 3.24 That study also found that in 38 per cent of cases, motorcyclists believed their crashes were due to the inattention of other road users and not being seen by the other vehicle operator.¹¹¹ A 2013 Centre for Road Safety NSW prevalence study found that 93 per cent of riders believed accidents were caused by drivers not seeing motorcyclists.¹¹²
- 3.25 Low conspicuity of motorcycles was noted as a key crash risk in various submissions received by the Committee. The popularity of dark bikes and black clothing, such as jackets in particular, was perceived as a major risk factor, leading to motorcycle crashes.¹¹³
- 3.26 Motorcycle groups, on the other hand, questioned the extent of low conspicuity of motorcycles as a crash risk and highlighted the role of other factors, such as driver inattention, as a key crash risk for motorcycles.¹¹⁴

INTERACTION BETWEEN MOTORCYCLISTS & OTHER ROAD USERS

- 3.27 The NSW Motorcycle Safety Strategy 2012-2021 identified the interaction between road users and motorcyclists as one of the key road safety issues.¹¹⁵

Single vehicle versus multi vehicle crashes

- 3.28 According to 2013 research by Dr Elizabeth de Rome, 40 per cent of motorcycle crashes are single vehicle crashes.¹¹⁶ This is consistent with historical data provided by the Transport and Road Safety Centre (TARS) at the University of New South Wales. According to their retrospective study of motorcycle fatalities between 2001 and 2006, using the Australian National Coroner's Information

¹⁰⁸ Dr de Rome, Evidence, 12 October 2015, p. 18.

¹⁰⁹ Submission 17, Transport for NSW, p. 56.

¹¹⁰ Submission 17, Transport for NSW, p. 56.

¹¹¹ Submission 17, Transport for NSW, p. 56.

¹¹² Submission 17, Transport for NSW, p. 56.

¹¹³ Submission 3, Mr Kenneth Levien, p. 1; and submission 7, Mr Peter Lenaghan, p. 1.

¹¹⁴ Submission 10, National Motorcycle Alliance, pp. 5-6.

¹¹⁵ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 – 2021*, p. 18.

¹¹⁶ De Rome (2014) in Submission 14, Institute of Public Works Engineering Australasia Limited (IPWEA), NSW Division, pp. 15-16.

System (NCIS), 56 per cent were due to multi-vehicle crashes while 44 per cent were a result of single-vehicle crashes.¹¹⁷

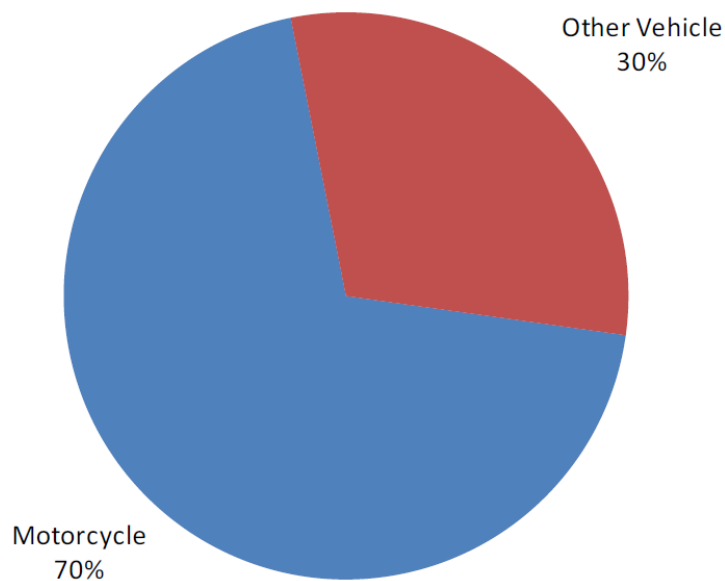
The key vehicle in multi- vehicle crashes

3.29 'Key vehicle status' in the road user movements of crashes can suggest the traffic unit largely responsible for the crash occurring.¹¹⁸ Yet, it needs to be noted that 'crashes are multi-factorial in nature and therefore the crash database does not assign fault in crashes'.¹¹⁹

3.30 According to the Strategy, approximately 'two thirds of crashes involving a motorcycle and motor vehicle, the motor vehicle was considered the key vehicle'.¹²⁰ Further, in the submission to the Committee, Transport for NSW, provided a graph (see below) and stated that motorcycles were identified as the key vehicle in 70 per cent of all motorcycle fatal and matched serious injury crashes.¹²¹

Figure 4 - Fatal and Matched Serious Injury Motorcycle Crashes, NSW, Key Vehicle Status, Type of Vehicle, 2009-2013

CrashLink/Health Data Linkage



Perceptions and attitudes

3.31 Studies of motorcycle crashes caused by behavioural factors have found that when the motorcyclist was responsible for the crash, it was often due to a loss of

¹¹⁷ Submission 22, Transport and Road Safety Research Centre (TARS), University of New South Wales, p. 9.

¹¹⁸ Submission 17, Transport for NSW, p. 35.

¹¹⁹ Submission 17, Transport for NSW, p. 35.

¹²⁰ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 – 2021*, p. 18.

¹²¹ Submission 17, Transport for NSW, p. 36.

control linked with speed, alcohol impairment and reckless or careless riding behaviour.¹²²

- 3.32 A 2012 survey, commissioned by the Centre for Road Safety¹²³, found that 53 per cent of motorcyclists had experienced a near miss with another vehicle while nearly a third of drivers experienced a near miss with a motorcyclist.¹²⁴
- 3.33 The survey also found 61 per cent of drivers surveyed, had negative opinions of riders.¹²⁵ It also revealed that NSW drivers and riders blame each other as being responsible for crashes.¹²⁶
- 3.34 The National Motorcycle Alliance submission stated that 60 per cent of motorcycle riders they surveyed named the behaviour of other road users as the biggest issue affecting their safety, with 84 per cent seeing other road users as the biggest threat to their safety.¹²⁷ The survey also revealed survey respondents equally ranked driver distraction, poor skills, poor attitude and lack of awareness the main contributors to driver errors which endanger riders.¹²⁸

INHERENT VULNERABILITIES

- 3.35 The Motorcycle Safety Strategy identified the design of the motorcycle itself as a major contributor to rider injuries and death.¹²⁹ This can be attributed to: 1) the lack of protection in the event of a crash, relative to other motorists; 2) vehicle instability; and 3) the relative vehicle size.

Vehicle design and lack of mechanical protection

- 3.36 Compared to other vehicles, motorcycles lack physical protection in the event of a crash. Moreover, motorcycles also offer less mechanical protection than other vehicles – the lack of crumple zones, air bags and seat belts greatly increases the risk of serious injury or death to the rider.¹³⁰

Vehicle instability

- 3.37 Motorcycles are inherently unstable and when compared with cars have ‘an extremely small contact point with the road’.¹³¹

Vehicle size

- 3.38 Due to their size, motorcycles are also less obvious on the road, and may be missed by other road users. This is a significant risk factor, as ‘car drivers who collide with motorcycles usually claim that they did not see an approaching

¹²² Transport for NSW, *NSW Motorcycle Safety Strategy 2012-2021*, p. 16.

¹²³ Ipsos Social Science Research Institute, *Motorcycle Attitudinal Quantitative Research Study, 2012*.

¹²⁴ Submission 17, Transport for NSW, pp. 54-55.

¹²⁵ Submission 17, Transport for NSW, p. 55.

¹²⁶ Submission 17, Transport for NSW, p. 55.

¹²⁷ Submission 10, National Motorcycle Alliance, p. 13.

¹²⁸ Submission 10, National Motorcycle Alliance, p. 13.

¹²⁹ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 -2021*, p.21.

¹³⁰ Submission 11, The Survive the Ride Association, p. 3.

¹³¹ Submission 17, Transport for NSW, p. 58.

motorcycle'.¹³² Furthermore, the crash type for motorcycle-motor vehicle crashes seems to confirm this. In fact, motorcycle-motor vehicle crashes are commonly intersection crashes and usually include 'adjacent approach crashes, rear end crashes, opposing vehicle/turning crashes and lane change crashes'. These crash types suggest that the driver 'may have failed to detect the motorcycle during the critical road user manoeuvre'.¹³³

ROADS AND ROAD ENVIRONMENT FACTORS

- 3.39 The Motorcycle Safety Strategy identified roads and road environment factors as potential crash risks for motorcyclists. According to the Strategy, motorcyclists are more vulnerable to road surface and conditions than other road users and the road texture, surface and hazards such as gravel and potholes will impact a motorcycle more than other vehicles.¹³⁴ Motorcycle riders are also at risk from insufficient shoulder and clear zone widths, rumble and median strips, road furniture placement and road marking visibility.¹³⁵

Road surface, alignment and other hazards

- 3.40 According to the Strategy, the quality of road surface is particularly important to motorcyclists as the 'motorcycle stability can be affected more by changes in the shape, texture, or the skid resistibility of the road surface'.¹³⁶ Changes in surface that reduce friction combined with no signage to advise riders of this, increase the risk of a crash.¹³⁷
- 3.41 The Strategy also addressed road alignment as a potential risk for motorcyclists. In the Strategy, Transport for NSW identified that:
- Motorcycles are especially vulnerable to collisions on bends and curves. Loss of control is more likely where acceleration or deceleration occurs, or where the stability of the motorcycle is threatened.¹³⁸
- 3.42 Other potential road hazards for motorcycles include insufficient shoulder and clear zone widths, rumble and median strips, road furniture placement and road marking visibility.¹³⁹
- 3.43 According to the NSW Chapter of the Australasian College of Road Safety, hazards such as loose gravel, diesel spill or a pothole contributed to 20 per cent of all single vehicle crashes. 26 per cent of these crashes took place on curves and 14 per cent were on straight sections of road.¹⁴⁰
- 3.44 The Transport and Road Safety Research Centre (TARS), University of New South Wales, advised that fixed objects, particularly trees and poles, were a threat to

¹³² Transport for NSW, *NSW Motorcycle Safety Strategy 2012 -2021*, p. 24.

¹³³ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 -2021*, p. 24.

¹³⁴ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 -2021*, p. 14.

¹³⁵ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 -2021*, p. 14.

¹³⁶ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 -2021*, p. 14.

¹³⁷ Transport for NSW, *Making roads more motorcycle friendly*, p. 5, attached to submission 17, Transport for NSW.

¹³⁸ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 -2021*, p. 15.

¹³⁹ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 -2021*, p. 14.

¹⁴⁰ Submission 12, NSW Chapter of the Australasian College of Road Safety, p. 3.

riders. They provided findings of a 2009 study of US motorcycle crashes which showed that the risk of a motorcyclist dying was double when hitting a tree, compared to a W-Beam barrier.¹⁴¹ According to that study, installing a road side barrier to protect road users striking trees reduces the risk of being killed by up to 3.6 times than if the barrier was not present.¹⁴²

- 3.45 The Motorcycle Council of NSW Inc. also raised wildlife as a road hazard for motorcycles, however there are variations in research findings as to the problem. Mr Burns cited examples of kangaroos hopping out unexpectedly, and riders being thrown off their motorcycle after hitting a wombat.¹⁴³ He advised the Committee that six per cent of single vehicle deaths are caused by hitting an animal.¹⁴⁴ However, research undertaken in Western Queensland has highlighted that 25 per cent of single-vehicle fatalities in that region are attributable to striking an animal.¹⁴⁵

Conclusions

- 3.46 The Committee notes that speeding as a factor in motorcycle crashes may be overestimated. Nevertheless, the Committee is concerned that speeding continues to be the leading factor in motorcycle casualties in NSW. An assessment of strategies to address speeding as a risky behaviour is addressed in the Chapter on Safer People Measures of this report.
- 3.47 The Committee notes that, although there have been some improvements over the last ten years, alcohol continues to be one of the key contributing factors to motorcycle fatalities. Yet, evidence presented to the Committee suggests that reducing the BAC limit for motorcyclists would not have the desired effect.
- 3.48 The Committee considers that the potential benefits of mandating alcohol interlock for all motorcyclists would need to be researched in more detail before any conclusions can be drawn.
- 3.49 The Committee notes that the role of drugs in motorcycle crashes is a field that warrants further research.
- 3.50 The Committee notes that fatigue continues to be one of the key causes of motorcycle crashes.
- 3.51 The Committee considers that the causes and effects of fatigue are well-understood and that it is plausible that riding requires greater cognitive and physical demands than driving. Consequently, the Committee questions the need for commissioning additional research into this aspect at this stage.
- 3.52 The Committee notes that Transport for NSW has already identified strategies to manage rider fatigue and that its efforts should be focused on encouraging riders to implement those.

¹⁴¹ Submission 22, The Transport and Road Safety Research Centre (TARS), University of New South Wales, p. 23.

¹⁴² Submission 22, The Transport and Road Safety Research Centre (TARS), University of New South Wales, p. 30.

¹⁴³ Mr Burns, Evidence, 12 October 2015, p. 45.

¹⁴⁴ Mr Burns, Evidence, 12 October 2015, p. 45.

¹⁴⁵ Mr Burns, Evidence, 12 October 2015, p. 45.

- 3.53 The Committee also notes that rider age, experience and manoeuvre; unlicensed riding; low conspicuity; the behaviour of motorcyclists and other road users; inherent vulnerabilities and roads and road environmental factors also present significant crash and injury risk factors. Current and future strategies, which address these, are discussed in the following chapters of the report.

RECOMMENDATION 2

The Committee recommends that Transport for NSW commissions research into the role of alcohol and drugs in motorcycle crashes and strategies for deterring this risk-taking behaviour.

RECOMMENDATION 3

The Committee recommends that Transport for NSW distributes more widely information on recognising and adequately responding to early signs of rider fatigue, as presented on its *Ride to Live* website.

Chapter Four – Safer road measures

- 4.1 This chapter examines motorcycle safety in New South Wales with particular reference to the inquiry's third term of reference which covers the subject of roads and road environment improvements.
- 4.2 The objective of the strategies outlined in the 'Safe Roads component' of the NSW Motorcycle Safety Strategy 2012 – 2021 is to reduce the number of motorcycle crashes, the severity of injuries and the number of fatalities attributable to road design, maintenance and operational factors.¹⁴⁶ Initiatives include: researching road safety engineering treatments; ensuring safe roads principles are understood by road designers, maintainers and engineers; contributing to the National Road Safety Strategy by introducing a blackspot/length program; and investigating ways to improve post-crash emergency responses.¹⁴⁷

MOTORCYCLE FRIENDLY ROADS & ROAD ENVIRONMENT DESIGN

Implementation of design and construction guidelines

- 4.3 One of the Actions for First Three Years under the NSW Motorcycle Safety Strategy is to 'Educate road asset owners to consider motorcycle safety while roads are designed, constructed, maintained and operated'.¹⁴⁸ To this end, RMS has adopted the VicRoads' *'Making roads more motorcycle friendly – a Guide to Road Maintenance and Design, materials'*.¹⁴⁹
- 4.4 Transport for NSW states in its submission that the *Making Roads Motorcycle Friendly Guide* continues to guide practitioners at Roads and Maritime Services (RMS) and in Local Government to consider the safety of motorcyclists when roads are designed, constructed, maintained and operated. Additionally, the Centre for Road Safety (CRS) provides ongoing input into a number of Austroads guides which include advice on how to make the road environment safer for motorcyclists.¹⁵⁰
- 4.5 Nevertheless, concern about deficiencies in road design and maintenance on both urban and rural road networks was a recurring theme in a number of submissions to the inquiry.¹⁵¹ In particular, concerns were raised in relation to lack of a consistent implementation and systematic monitoring of the implementation of the motorcycle friendly design and construction standards as identified in the *'Making Roads Motorcycle Friendly Guide'*.¹⁵²

¹⁴⁶ Transport for NSW, *NSW Motorcycle Safety Strategy 2012-2021*, pp. 14 - 15.

¹⁴⁷ Transport for NSW, *NSW Motorcycle Safety Strategy 2012-2021*, pp. 14 - 15.

¹⁴⁸ Transport for NSW, *NSW Motorcycle Safety Strategy 2012-2021*, p. 14.

¹⁴⁹ *The Good Gear Guide*, attached to Submission 17, Transport for NSW.

¹⁵⁰ Submission 17, Transport for NSW, p. 65.

¹⁵¹ Submission 4, Shooters and Fishers Party NSW Motorcycle Branch, pp. 2-3; Submission 13, National Motorists Association of Australia, pp. 6-7; and Submission 15, Motorcycle Council of NSW Inc., pp. 16-17.

¹⁵² Submission 4, Shooters and Fishers Party NSW Motorcycle Branch, pp. 2-3; Submission 13, National Motorists Association of Australia, pp. 6-7 and Submission 15, Motorcycle Council of NSW Inc., pp. 16-17.

- 4.6 For example, referring to the concerns of the Motorcycle Council of NSW Inc. in relation to the lack of implementation of the design guidelines by Local Government, Mr Christopher Burns, Vice-Chairman, informed the Committee that:

‘...there seems to be a disconnect between the Centre for Road Safety, Roads and Maritime Services and local councils in implementing these guidelines’.¹⁵³

- 4.7 He attributed this deficiency to: ‘... a lack of funding, a lack of money, a lack of expertise, and a lack of peer support from the higher levels of Roads and Maritime Services.’¹⁵⁴

- 4.8 As to whether monitoring is conducted by RMS to ensure that best practice design and construction information in relation to motorcycle safety is being utilised by Local Government, Mr Mike Cush, Network General Manager, NSW, stated that:

...I am not aware of any specific monitoring in that respect other than that we are constantly in contact with local government about a range of issues on the local government network. Clearly, under the Roads Act, local government is the roads authority for the roads under their control. We respect their function in that area but we are constantly in contact on road safety and other issues with local government on an ongoing basis.¹⁵⁵

- 4.9 Commenting on the need to have design and maintenance guidelines implemented at the Local Government level, Professor Ann Williamson, Professor and Director, Transport and Road Safety Research Centre (TARS), University of New South Wales, advised that it would be necessary to conduct ‘... a project with auditing and go around the different councils, publish the results and then see what governments would do’.¹⁵⁶

Road Safety Barriers

- 4.10 Another initiative targeted at making roads more motorcycle friendly was to continue research into safety barriers during the first three years of the Motorcycle Safety Strategy. In particular, given that the supporting posts of the W Beam barriers are considered a death or injury risk for motorcyclists,¹⁵⁷ fitment of under run/rub rails on W Beam barriers was identified as a specific area to be examined.

- 4.11 W Beam, or Armco, barriers are a semi rigid type of roadside crash barrier designed to reduce the severity of a crash when cars and trucks leave the roadway.¹⁵⁸

¹⁵³ Mr Christopher Burns, Vice-Chairman, Motorcycle Council of NSW Inc., Transcript of evidence, 12 October 2015, p. 42.

¹⁵⁴ Mr Burns, Evidence, 12 October 2015, p. 42.

¹⁵⁵ Mr Mike Cush, Network General Manager, NSW, Roads and Maritime Services, Transcript of evidence, 12 October 2015, p. 8.

¹⁵⁶ Professor Ann Williamson, Professor and Director, Transport and Road Safety Research Centre (TARS), University of New South Wales, Transcript of evidence, 12 October 2015, p. 53.

¹⁵⁷ Submission 15, Motorcycle Council of NSW Inc., p. 5.

¹⁵⁸ Submission 15, Motorcycle Council of NSW Inc., p. 17.

- 4.12 There are a number of products available that are designed to make crash barriers less harmful and prevent riders from sliding under the barrier or coming into direct contact with posts or sharp edges. Under run/rub rails are such one product, designed to be fitted to W Beam barriers in cases where the supporting posts are the main cause of death or injury.¹⁵⁹
- 4.13 Since 2013, the Centre for Road Safety (CRS) and Roads and Maritime Services (RMS) have been testing the effectiveness of retrofitting existing steel W-beam safety barriers. In its submission to the inquiry, Transport for NSW advised that 'analysis of the data has now been completed and RMS is finalising its research report'.¹⁶⁰
- 4.14 The evidence presented by motorcycling and motoring organisations has largely endorsed the potential benefit of making W-beam barriers more motorcyclist friendly.¹⁶¹ The NRMA has commended the Transport for NSW and RMS trialling of rub rails under W-beams to prevent motorcyclists sliding under barriers.¹⁶²
- 4.15 Mr Bernard Carlon Acting Executive Director, Centre for Road Safety, Transport for NSW, cited the testing and analysis of the efficacy of underarm barrier systems as one of the key achievements in the first three years of the NSW Motorcycle Safety Strategy.¹⁶³ He also noted the need for 'more of the sort of research that improves the quality of the road environment where motorcyclists are crashing...'¹⁶⁴
- 4.16 In its response to questions asked by the Committee, Transport for NSW provided an update on the project of testing rub rails under W-beams to prevent motorcyclists sliding under barriers:
- (1) Overall, the results confirmed that 'the installation of Motorcyclists Safety Barrier Systems (MSBS) to the standard G 4 W-beam resulted in a reduced risk for serious injury to a motorcyclist without an increased risk for motor vehicle occupants'.
 - (2) Based on the crash test findings, two rub rail products are now approved by RMS to use as motorcycle underrun systems on the State road network.
 - (3) Initial installations are being targeted to the outside of curves on popular motorcycle routes. The Safer Roads Program has funded the installation of the motorcycle specific underrun barrier at a number of locations across the State.¹⁶⁵

¹⁵⁹ Submission 15, Motorcycle Council of NSW Inc., p. 5.

¹⁶⁰ Submission 17, Transport for NSW, p. 65.

¹⁶¹ Mr Burns, Evidence, 12 October 2015, p. 42.

¹⁶² Mr Jack Haley, Senior Policy Adviser, NRMA Motoring Services, Transcript of evidence, 12 October 2015, p. 26.

¹⁶³ Mr Bernard Carlon, Acting Executive Director, Centre for Safety, Transport for NSW, Transcript of evidence, 12 October 2015, p. 3.

¹⁶⁴ Mr Carlon, Evidence, 12 October 2015, p. 4.

¹⁶⁵ Transport for NSW, Centre for Road Safety, Answers to Questions on Notice, 2 November 2015, p. 12.

MAINTAINANCE & OPERATION OF ROADS

Role of & Partnership with Local Government

- 4.17 Local Councils play a pivotal role in the design, maintenance and operation of roads in NSW. In fact, in NSW, local councils are 'Road Authorities' under the *Roads Act 1993*. Local Government has responsibility for 85 per cent of the road network and this portion of the network accounts for around 60 per cent of road accidents.¹⁶⁶
- 4.18 Current funding arrangements recognise that Local Government is a key partner with state and federal governments in delivering road services and community-based road safety programs.¹⁶⁷ Yet, the Institute of Public Works Engineering Australasia Limited (IPWEA) NSW Division warned that there is a funding shortfall and that the condition of the local and regional road networks is deteriorating, which is producing a corresponding deterioration in the safety of the network for road users, including motorcyclists.¹⁶⁸
- 4.19 On the other hand, Mr Bernard Carlon, Acting Executive Director, Centre for Road Safety, outlined a range of funding sources supporting the NSW Motorcycle Strategy which could be of assistance to the maintenance and improvement of local roads:
- ... we do actually have a Safer Roads Fund as part of the Community Road Safety Fund. We are investing more than \$60 million in projects, of which \$9 million is dedicated to local roads. We also have a Motorcycle Fund as well for treatment of locations that have safety issues to do with motorcyclists....We do have funds available for treating and rectifying black spot locations and other treatments associated with either motorcycle risks or general risks associated with motor vehicle usage of those road networks in local government.¹⁶⁹
- 4.20 Mr Melvin Eveleigh, Manager for Safer Roads, Centre for Road Safety, advised that, in addition to the wider package of funding resources cited by Mr Carlon, there is a specific \$3 million allocation to be spent annually on motorcycle safety under the NSW Motorcycle Safety Strategy. He said that this could involve projects such as realigning curves or making the route consistent in terms of speed limit and advisory signs and that this funding could be allocated to either State roads or Local Government roads.¹⁷⁰
- 4.21 Notwithstanding the resources that are being directed to the safety improvement of road infrastructure in NSW, the submission of the IPWEA (NSW) includes the following recommendation:
- While recognising that both the Australian and NSW governments have increased spending on roads in NSW, IPWEA (NSW) calls for a sustainable funding model that

¹⁶⁶ Submission 14, Institute of Public Works Engineering Australasia Limited NSW Division, p. 20.

¹⁶⁷ Submission 14, Institute of Public Works Engineering Australasia Limited NSW Division, p. 4.

¹⁶⁸ Submission 14, Institute of Public Works Engineering Australasia Limited NSW Division, p. 20.

¹⁶⁹ Mr Carlon, Evidence, 12 October 2015, p. 8.

¹⁷⁰ Mr Melvin Eveleigh, Manager, Safer Roads, Centre for Road Safety, Transport for NSW, Transcript of evidence, 12 October 2015, p. 8, p. 10 and p. 11.

addresses the growing infrastructure backlog and infrastructure maintenance going forward.¹⁷¹

- 4.22 The question of whether rural roads have received adequate attention under the current road safety action plan was also a matter of concern for the IPWEA (NSW). Mr Michael Savage, Manager, Roads and Transport Directorate, stated that:

There certainly is a lot of room for more focus on regional areas within the reviewed State Government plan. As I have explained, the total length of road that councils are responsible for is large and I think they are not getting the assistance they need, either financially or in terms of technical support, to address some of these issues. It is fine that the State Government and its instrumentality should deal with the State road network first, but sharing that information and wider distribution through local government is really important to make sure that we deal with this right across the State.¹⁷²

- 4.23 The increasing autonomy of Local Government to make its own priorities as to how and where road safety funding is spent is also a factor to be considered. As was noted by Mr Mike Cush, Network General Manager, NSW, Roads and Maritime Services:

I would not like the Committee to think that local government is constrained to only that level of funding. The Government annually provides local government with other funding, block grant programs, repair programs and more recently there are other programs that both the State and Federal Governments have initiated where local government as the road authority can decide its priorities for where it directs its own funding....¹⁷³

Road environment incident/hazard reporting system

- 4.24 Given that the road surface and environment can pose a unique risk to motorcyclists, investigating effective road environment incident reporting that is available to the motorcycling community is listed among the specific Actions for the First Three Years of the Motorcycle Safety Strategy.¹⁷⁴

Current system and issues

- 4.25 Currently, road users may report road issues to the Transport Management Centre (TMC), which uses its website to inform the public of hazards, incidents or road conditions that may significantly affect the safety or efficiency of the road network.¹⁷⁵ If the hazard such as potholes and loose gravel is on a local or regional road, it needs to be reported to the relevant the Local Council. At the public hearing, RMS informed the Committee that it regularly receives information from motorcycle organisations and the public, providing information on road safety sites and incidents.¹⁷⁶

¹⁷¹ Submission 14, Institute of Public Works Engineering Australasia Limited (IPWEA), NSW Division, p. 21.

¹⁷² Mr Michael Savage, Manager, Roads and Transport Directorate, Institute of Public Works and Engineering Australasia Limited (IPWEA), NSW Division, Transcript of evidence, 12 October 2015, p. 22.

¹⁷³ Mr Cush, Evidence, 12 October 2015, p. 11.

¹⁷⁴ Transport for NSW, *NSW Motorcycle Safety Strategy 2012-2021*, pp. 14 - 15.

¹⁷⁵ Transport for NSW, Centre for Road Safety, Answers to Questions on Notice, 2 November 2015, p. 8.

¹⁷⁶ Mr Cush, Evidence, 12 October 2015, p. 11.

- 4.26 Yet, the NRMA Motoring and Services has informed the Committee of key issues with the current road incident reporting system, including ineffective reporting methods, inefficient customer service and lack of feedback to the customer on the status of the incident.¹⁷⁷

Potential features of a new road hazard reporting system

- 4.27 In order to improve the effectiveness of reporting methods, the NRMA recommended that an easy-to-use system should be created. It would enable road users (who are in fact the first to identify road safety issues) to report these to the relevant authorities.¹⁷⁸ To that end, NRMA has pointed to the 'Report It' section of the Sutherland Shire Council website as an example of how Transport for NSW could improve the ability of road and other transport users to advise it of road safety issues.^{179 180}

Reporting tools

- 4.28 In order to address the difficulty of road users sourcing information on who is responsible for a particular road, the NRMA has asked RMS to publish maps and also to make its mapping data available to others.¹⁸¹ The NRMA has pointed out that, from a road user's perspective, it would be easier if one application (such as the Transport Management Centre's *Live Traffic* app) could be used by road users to identify and report issues related to not only the 18,000km of State road network but also to the 180,000km of roads across NSW, thus including all the local and regional roads for which Local Government is responsible. This would also help to identify trends, performance and hot spots.¹⁸²
- 4.29 The Motorcycle Council of NSW Inc. suggested that, once identified, the road safety hazard should be reported via a dedicated road hazard reporting system that disseminates information to Councils and RMS.¹⁸³ It referred to the availability of modern technology such as phone apps, which would enable motorcyclists to report GPS location and send photographs of hazardous roads to a central reporting authority.¹⁸⁴
- 4.30 Its submission cited the example of Shellharbour Council's *Report a Hazard* application for use on mobile phones as an initiative which has enabled the Council to implement road remediation more efficiently by identifying multiple repairs in close proximity and allocating them to a repair crew. The Motorcycle

¹⁷⁷ NRMA Motoring and Services, Answers to Questions on Notice, 21 October 2015, p. 2.

¹⁷⁸ NRMA Motoring and Services, Answers to Questions on Notice, 21 October 2015, p. 2.

¹⁷⁸ NRMA Motoring and Services, Answers to Questions on Notice, 21 October 2015, p. 2.

¹⁷⁹ Sutherland Shire Council, *Report It - Potholes, Roads and Road Signs*, 2015, viewed 21 October 2015, <<http://www.sutherlandshire.nsw.gov.au/Council/Policies-and-Documents/Tasks/Report-It/Report-It-Potholes-Roads-and-Road-Signs>>.

¹⁸⁰ NRMA Motoring and Services, Answers to Questions on Notice, 21 October 2015, p. 2.

¹⁸¹ NRMA Motoring and Services, Answers to Questions on Notice, 21 October 2015, p. 3.

¹⁸² NRMA Motoring and Services, Answers to Questions on Notice, 21 October 2015, p. 3.

¹⁸³ Submission 15, Motorcycle Council of NSW Inc., p. 26.

¹⁸⁴ Mr Guy Stanford, Chair, Helmets Committee, Motorcycle Council of NSW Inc., Transcript of evidence, 12 October 2015, p. 46.

Council has recommended that this type of initiative should be a model for other Councils around NSW and should be encouraged.¹⁸⁵

Feedback

- 4.31 Once reported, the NRMA noted that, the customer should be provided with an update on the status of a road hazard report. NRMA explained that it has recently proposed to RMS and the TMC that a more responsive two-way flow of information with customers could be achieved by adding to current mobile phone applications an additional feature, such as the TMC's *Live Traffic* application for mobile phones.¹⁸⁶

ROAD SAFETY ASSESSMENTS/AUDITS

- 4.32 As part of the Strategy, Transport for NSW stated that the Motorcycle Safety Infrastructure Program has been developed to implement road safety audits. Priority is given to roads with a history of crashes involving motorcycle riders or where the risk of crashes is high.¹⁸⁷ The purpose of the Program is to address the following Safer Roads Actions for the First Three Years recommendations from the Strategy:

- (1) Use Road Safety Audits to review and improve motorcycle routes and safety features (Item 6) and
- (2) Contribute to National Road Safety Strategy with regard to safety improvements on popular motorcycle routes (Item 8).¹⁸⁸

- 4.33 In 2012, the former Motor Accident Authority (MAA) – now replaced by the State Insurance Regulatory Authority (SIRA) – contributed \$66,000 towards road safety audits undertaken by the CRS on four popular motorcycle routes. Altogether, since 2013, approximately \$3 million has been spent annually on route treatments where black spots have been identified.¹⁸⁹

- 4.34 In the 2015/16 financial year, the \$3m allocation under the Motorcycle Safety Infrastructure Program will implement further initiatives under the Motorcycle Safer Roads pillar of the Strategy. In total, eight road safety projects are due to be completed this financial year including roads in the Hunter, South West and Sydney regions. The Transport for NSW submission indicates that funding will be prioritised approximately as follows: \$2m for route treatments and black spots within identified popular routes, and \$1m for motorcycle black spots outside identified popular routes.¹⁹⁰

- 4.35 Transport for NSW also advised that:

¹⁸⁵ Submission 15, NSW Motorcycle Council Inc., p. 17.

¹⁸⁶ NRMA Motoring and Services, Answers to Questions on Notice, 21 October 2015, p. 2.

¹⁸⁷ Submission 17, Transport for NSW, p. 66.

¹⁸⁸ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 – 2021*, p. 15.

¹⁸⁹ Submission 17, Transport for NSW, p. 66.

¹⁹⁰ Submission 17, Transport for NSW, pp. 66 - 67.

'This is an ongoing program of safety works targeted at locations and treatments that best reduce the occurrence, severity and risk of motorcycle crashes on NSW roads.'¹⁹¹

Comprehensive and pro-active road safety audits

4.36 Transport for NSW informed the Committee that Roads and Maritime Services (RMS) is undertaking a comprehensive program to manage the condition of road surfaces across its network. This includes regular inspections to identify hazards as well as a yearly review of wet surface crash data as part of a Region Wide Analysis. This data is used to inform treatment proposals, which are submitted under the Safer Roads and Blackspot Program. Projects are monitored yearly to determine the effectiveness of the treatments.¹⁹²

4.37 Mr Melvin Eveleigh, Manager, Safer Roads, Centre for Road Safety, Transport for NSW, confirmed that Safe Road, Motorcycle and Black Spot projects are conducted proactively. He informed the Committee that:

The projects that are submitted are evaluated based on a benefit-cost ratio [BCR], where there is a model where all your crash data gets put in, the cost of the treatments and the benefits of the treatments and we rank all the projects based on a BCR.¹⁹³

4.38 With regard to assessing whether remedial works undertaken as a result of safety reviews of popular motorcycle routes have been effective, Transport for NSW has advised that it is necessary to have a minimum of five years data post implementation of the works in order to make a valid assessment of the impact of improvements.¹⁹⁴

4.39 The NSW Chapter of the Australasian College of Road Safety commended RMS for conducting pro-active road audits. Dr Elizabeth de Rome, Senior Research Officer, Neuroscience Australasia, cited, in particular, some themed road safety audits which have been undertaken by RMS. She explained that:

... A road safety audit can [be] commissioned for a stretch of road such as the old Pacific Highway or the Royal National Park roads. That means trained people can anticipate what could go wrong for motorcyclists travelling on a particular road. It is the notion of anticipating what could go wrong rather than going in afterwards and determining what went wrong. A wide range of things could go wrong, but if we fixed one bit it might create issues somewhere else. We need a road safety audit system.¹⁹⁵

Motorcyclist Expertise & Instrumented Motorcycles in Road Audits

4.40 The Motorcycle Council submission has also pointed out that Queensland currently uses an instrumented motorcycle for road audits of popular motorcycle

¹⁹¹ Transport for NSW, Centre for Road Safety, Answers to Questions on Notice, 2 November 2015, p. 6.

¹⁹² Transport for NSW, Centre for Road Safety, Answers to Questions on Notice, 2 November 2015, p. 8.

¹⁹³ Mr Eveleigh, Evidence, 12 October 2015, p. 11.

¹⁹⁴ Transport for NSW, Centre for Road Safety, Answers to Questions on Notice, 2 November 2015, p. 13.

¹⁹⁵ Dr Elizabeth de Rome, Senior Research Officer, Neuroscience Research Australia and NSW Chapter Committee member, Transcript of evidence, 12 October 2015, p. 19.

routes. The submission recommends the development of an instrumented motorcycle for use in road audits in NSW.¹⁹⁶

- 4.41 Under the Queensland Motorcycle Safety Strategy 2009-2012, a plan was developed to purchase an instrumented motorcycle which was equipped with cameras, recording devices and GPS for the purpose of a motorcycle auditing tool. The aim was to collect data to enable evaluation of parts of the road network from a motorcyclist's perspective and to study the dynamic behaviour of the motorcycle as well as to conduct rider behaviour studies. It was envisaged that this would assist with the development of more motorcycle specific countermeasures and in the longer term with development of design standards for motorcycles that are more cognisant of motorcycle performance characteristics.¹⁹⁷
- 4.42 According to the Motorcycle Council, data collected from an instrumented motorcycle would be able to provide improved knowledge both of the dynamic behaviour of motorcycles and of rider's behaviour. This could assist with the development of countermeasures and design standards that are more cognisant of motorcycle performance characteristics.¹⁹⁸
- 4.43 The NRMA has similarly expressed the view that road safety audits should be more realistic and ensure that they include experienced motorcyclist expertise within the audit team as well as experienced operators of other vehicle types if difficult road conditions are to be properly identified. The NRMA has also suggested improving road safety audits by including a 'ride through' and ensuring that issues are considered from a motorcyclist's perspective.^{199 200}

OTHER SAFER ROADS INITIATIVES

Post-crash Emergency Response

- 4.44 Exploring emergency location detection and investigating the feasibility for safety phones along popular motorcycle routes are listed among the Actions for the First Three Years under the 'Safe Roads' pillar of the Motorcycle Safety Strategy.²⁰¹
- 4.45 Specifically, in their Motorcycle Safety Strategy, Transport for NSW highlighted the need for adequate and timely post-crash emergency response as it can save lives and decrease the injury severity. Furthermore, Transport for NSW acknowledged that emergency response to motorcycle crashes in rural locations may be delayed due to relative isolation at the crash site and issues such as 'poor

¹⁹⁶ Submission 15, Motorcycle Council of NSW Inc., pp. 25 -26.

¹⁹⁷ Motorcycle Eveleigh, M., '*Motorcycle Route Audits Using an Instrumented Motorcycle*', Queensland Department of Transport and Main Roads, 2010, pp 1-2, viewed 9 November 2015, <<http://casr.adelaide.edu.au/rsr/RSR2010/EveleighM.pdf>>.

¹⁹⁸ Submission 15, Motorcycle Council of NSW Inc., pp. 25 -26.

¹⁹⁹ NRMA Motoring and Services, Answers to Questions on Notice, 21 October 2015, p. 1.

²⁰⁰ Submission 15, Motorcycle Council of NSW Inc., p. 25.

²⁰¹ Transport for NSW, *NSW Motorcycle Safety Strategy 2012-2021*, Safe Roads, pp. 14 - 15.

mobile reception, inadequate emergency phones, lack of other road users in the event of a crash, and logistical access issues for emergency services'.²⁰²

- 4.46 In order to address these issues, Transport for NSW noted that it has made progress with the installation of emergency phones along popular motorcycle routes. This program is ongoing during 2015-16 with further installations to be completed in the north coast and Hunter regions.²⁰³
- 4.47 At the public hearing, Mr Carlon emphasised that the feedback from the motorcycle community has been very positive around the initiative of emergency phones installations. He also noted that the CRS has been working with motorcycling stakeholders to review other routes to determine whether satellite phones in other locations of popular riding routes and blackspot locations should be placed.²⁰⁴
- 4.48 Another initiative undertaken to improve the post-crash emergency response capability was the CRS's test of an automatic crash notification system. Yet, this proved to be unsuitable for motorcycles. According to Transport for NSW, CRS will conduct ongoing monitoring of this type of technology in the future.²⁰⁵

Conclusions

- 4.49 The Committee noted the numerous concerns about a lack of consistent auditing of the implementation of the *Making roads more motorcycle friendly – a Guide to Road Maintenance and Design*.
- 4.50 The testing of motorcycle crash barrier systems undertaken by Transport for NSW and RMS is a welcome achievement. The Committee understands that the report on analysis of the efficacy of underarm barrier systems is in the publication phase. The Committee considers it necessary that Transport for NSW and RMS ensure that the next phase of the Motorcycle Strategy reflects the findings on underarm barrier systems in its programs to make roadside barriers more motorcycle friendly.
- 4.51 While the Committee noted the differing views about adequacy of funding provided to Local Government to perform its functions under the *Roads Act 1993*, it is beyond the scope of this inquiry to determine what the adequate level is and whether it has been provided. The Committee considers that 'partnership' between Local Government and the State road authorities goes beyond funding. While this has been acknowledged by the Strategy, the Committee has not received a great deal of evidence as to what this partnership entails in practice.
- 4.52 The Committee agrees with the suggestions that there is scope for innovation in capturing and analysing feedback provided directly by road users as to the state of the roads. The Committee considers that an integrated road hazard reporting system is required to ensure that road hazards are dealt with effectively and efficiently. The Committee also finds merit in the examples of feedback systems

²⁰² Transport for NSW, *NSW Motorcycle Safety Strategy 2012-2021*, p. 15.

²⁰³ Submission 17, Transport for NSW, p. 66.

²⁰⁴ Mr Carlon, Evidence, 12 October 2015, p. 5.

²⁰⁵ Submission 17, Transport for NSW, p. 66.

already established at the Local Government level, which could be applied more widely.

- 4.53 The Committee notes that the report of the previous Joint Standing Committee on Road Safety in December 2010 recommended that the then Road and Traffic Authority (RTA) strengthen its monitoring of road surface conditions to improve safety for vulnerable road users. This required the RTA to implement a direct reporting system to alert the appropriate engineering and maintenance areas of the agency and local councils to potential hazards for immediate remediation as problems arise. (Recommendation 5).²⁰⁶ In view of the degree of concern which has been repeated in submissions to this inquiry, this Committee reiterates the recommendation.
- 4.54 The Committee commends the road authorities for undertaking proactive road safety audits because these can identify risks and prevent hazards for motorcyclists before injuries and fatalities occur or recur. Based on the evidence received, the Committee considers that road safety audits should include experienced motorcyclist expertise and/or use an instrumented motorcycle in the road safety audits in NSW.
- 4.55 The Committee notes the importance of having in place an adequate post-crash emergency response system, particularly in regional and rural areas. The Committee is satisfied that Transport for NSW has made progress with the installation of emergency phones along popular motorcycle routes and will make further progress with this initiative in its next three year plan.
- 4.56 The Committee is pleased that Transport for NSW will be investigating automatic crash notification system and other types of this technology to further enhance the motorcycle post-crash emergency response system in NSW.

RECOMMENDATION 4

The Committee recommends that Transport for NSW and Road and Maritime Services work with local councils in developing a system to ensure that the *Making roads more motorcycle friendly – a Guide to Road Maintenance and Design* is implemented consistently across the State.

RECOMMENDATION 5

The Committee recommends that Transport for NSW and Roads and Maritime Services, in consultation with Local Government NSW, create and implement a robust and independent quality assurance and auditing process of all road designs to ensure that established best practice standards are implemented.

RECOMMENDATION 6

The Committee recommends that Transport for NSW and Roads and Maritime Services devise and implement policies and programs, based on the findings on underarm barrier systems, to make existing barriers less harmful in causing injury to motorcyclists.

²⁰⁶ Joint Standing Committee on Road Safety, *Vulnerable Road Users, Inquiry into Motorcycle and Bicycle Safety*, Report 5/54, Parliament of NSW, December 2010, p. 52.

RECOMMENDATION 7

The Committee recommends that Transport for NSW, Roads and Maritime Services and Local Government NSW develop a practical partnership strategy, which should include a schedule of regular meetings to resolve any road safety management issues, share innovative developments and develop solutions for safer roads across NSW.

RECOMMENDATION 8

The Committee recommends that Transport for NSW and Roads and Maritime Services:

1. enhance their road environment incident and hazard reporting system to ensure that it is an integrated, user-friendly and responsive system, which uses the latest technology; and
2. investigate if the Shellharbour Council's *Report a Road Hazard* mobile phone application could be used as a model for the development of an improved hazard reporting system in NSW.

RECOMMENDATION 9

The Committee recommends that Transport for NSW and Roads and Maritime Services consider including experienced motorcyclist expertise and/or use an instrumented motorcycle in road safety audits.

Chapter Five – Safer people measures

- 5.1 This chapter examines motorcycle safety in NSW with particular reference to the inquiry's term of reference three, which covers the subject of communication and education campaigns.
- 5.2 The Safe People section of the NSW Motorcycle Safety Strategy 2012-2021 outlines strategies that seek to reduce the number of motorcycle crash fatalities and the severity of injury by reducing distractions, improving awareness and developing training, education and regulatory measures, which target both motorcyclists and motor vehicle drivers.²⁰⁷
- 5.3 Initiatives and actions focussing on the safety of people include:
- (1) Further research into motorcycle crashes and the impact of fatigue on motorcycling;
 - (2) Investigating enforcement strategies to deter risk-taking behaviours;
 - (3) Ongoing communications campaigns to target risk-taking behaviours; and
 - (4) Promoting safety awareness and crash care advice.²⁰⁸

SAFER MOTORCYCLIST BEHAVIOUR

Education

- 5.1 Assisting riders to manage the risk associated with riding is one of the key Actions in the First Three Year Plan. The two main public education campaigns to that end are the *Ride to Live* campaign and Motorcycle Awareness Week.²⁰⁹

Ride to Live campaign

- 5.2 In its submission to the inquiry, Transport for NSW provided an update on the implementation of the education campaigns. The *Ride to Live* campaign was launched in November 2014 and focusses on both motorcycle riders and motor vehicle drivers.²¹⁰
- 5.3 The *Ride to Live* campaign was developed on the basis of findings from crash data and attitudinal research and in close consultation with motorcycling organisations.²¹¹ It:

²⁰⁷ Transport for NSW, *NSW Motorcycle Safety Strategy 2012-2021*, p. 16.

²⁰⁸ Transport for NSW, *NSW Motorcycle Safety Strategy 2012-2021*, p. 17.

²⁰⁹ Transport for NSW, *NSW Motorcycle Safety Strategy 2012-2021*, p. 17.

²¹⁰ Submission 17, Transport for NSW, pp. 67- 68.

²¹¹ Submission 17, Transport for NSW, pp. 67- 68.

JOINT STANDING COMMITTEE ON ROAD SAFETY
SAFER PEOPLE MEASURES

- (1) acknowledges the motorcyclists' passion for riding, while challenging riders to better manage their risks on the road;
 - (2) includes multi-media advertisements (radio, Youtube, digital and outdoor advertising) and a dedicated website (ridetolive.com.au) with information as well as a range of hazard perception tests;^{212 213}
 - (3) distinguishes in its presentations between the crash risks faced by commuting motorcyclists and those faced by recreational riders;
- 5.4 The State Insurance Regulatory Authority (SIRA) has contributed over \$2 million in funding to the Centre for Road Safety (CRS) for the *Ride to Live* Motorcycle Safety Campaign.²¹⁴
- 5.5 According to Transport for NSW, the *Ride to Live* campaign has been successful so far for the following reasons:
- (1) Although it is too early to fully evaluate the effectiveness of the *Ride to Live* campaign due to its relatively recent launch in 2014, online surveys of riders found that recognition of the campaign was very high across all media. Messages have been successfully communicated. For example, the majority of riders thought that the television commercials made them think about the consequences of different choices motorcyclists make when riding.²¹⁵
 - (2) The response to ridetolive.com.au website has been extremely positive. Since its launch, there have been more than 99,000 users, spending an average of more than 3 minutes on the site (as at 14 July 2015). More than 70,000 online tests have been completed and there have been more than 277,000 YouTube views of the television commercials.²¹⁶
- 5.6 Mr Bernard Carlon, Acting Executive Director, Centre for Road Safety (CRS) also stressed that the feedback which the CRS has received from the stakeholders has been very positive.²¹⁷ He assured the Committee that the campaign will be ongoing to ensure continued awareness, relevance and effectiveness for riders in the target audience.²¹⁸
- 5.7 In evidence to the Committee, Mr Carlon stressed the vital role which the engagement with the motorcycling community has played in achieving success with the campaign. He informed the Committee that:

²¹² Submission 17, Transport for NSW, p. 67.

²¹³ Submission 17, Transport for NSW, p. 69.

²¹⁴ Submission 17, Transport for NSW, pp. 43 - 44.

²¹⁵ Submission 17, Transport for NSW, p. 70.

²¹⁶ Submission 17, Transport for NSW, p. 71

²¹⁷ Mr Bernard Carlon, Acting Executive Director, Centre for Road Safety, Transport for NSW, Transcript of evidence, 12 October 2015, p. 9.

²¹⁸ Submission 17, Transport for NSW, p. 71.

.... Their technical advice and engagement in terms of also spreading that message of *Ride to Live* and turning motorcycle riders into risk managers when they get out on the road is a critical element of changing the culture as well of motorcycle riding to ensure that it becomes safer.²¹⁹

5.8 Submissions received from motorcycling and motorist organisations have affirmed the effectiveness of the consultation process which has underpinned the development and implementation of the Strategy and the overall positive cooperation and partnership that has been established between Transport for NSW and the motorcycling community.²²⁰

5.9 In relation to the success of the *Ride to Live* Campaign, the Motorcycle Council of NSW Inc. has commented that:

... This campaign has met with rave reviews from riders and riding associations across Australia and met with praise at the recent Australian Motorcycle Council (AMC) annual seminar which had representatives from every state rider association in attendance.

Part of the success of this campaign was due to Centre for Road Safety involving the MCC of NSW and other stakeholders at the concept stage in order to create a campaign that was believable to riders and would not fall foul of criticism as some interstate campaigns have received.²²¹

5.10 The Survive the Ride Association of NSW (STRA NSW) praised Transport for NSW on the improvement in relations which has occurred since the previous Inquiry of the Joint Standing Committee on Road Safety in 2010.^{222 223}

Tackling Rider Fatigue as part of the Ride to Live campaign

5.11 In its evidence to the Committee, Transport for NSW stated that its *Ride to Live* website, which is part of its current motorcycle safety campaign, outlines strategies to manage fatigue.

5.12 For instance, information on the website

‘...encourages riders to watch for the early warning signs of rider fatigue including slow reactions, running wider on a corner, rough gear changes, and stiff joint (neck, knees and wrists) as well as the importance of being well rested before going on rides and avoiding alcohol if riding’.²²⁴

5.13 The specific section on fatigue on the *Ride to Live* website can be found at: <<http://ridetolive.nsw.gov.au/#!/tips/Fatigue>>.

²¹⁹ Mr Carlon, Evidence, 12 October 2015, p. 5.

²²⁰ Submission 8, Federal Chamber of Automotive Industries, p. 5; Submission 10, National Motorcycle Alliance, p. 3 and p. 6; Submission 11, The Survive the Ride Association of NSW, p. 4; and Submission 15, Motorcycle Council of NSW Inc., p. 20.

²²¹ Submission 15, Motorcycle Council of NSW Inc., p. 20.

²²² Joint Standing Committee on Road Safety, *Vulnerable Road Users, Inquiry into Motorcycle and Bicycle Safety*, Report 5/54, Parliament of NSW, December 2010.

²²³ Submission 11, The Survive the Ride Association of NSW, p. 4.

²²⁴ Submission 17, Transport for NSW, p. 55.

- 5.14 The *Ride to Live* website also includes a specific *Test your tired self* tool aimed not only motorcycle riders but all motor vehicle drivers to help them to be aware of fatigue symptoms while they are on the road.²²⁵ The *Test your tired self* webpage can be found at: <<http://testyourtiredself.com.au>>.
- 5.15 The strategies outlined on the website are based on the findings of research into rider fatigue, which was commissioned by the CRS in 2013 and which was discussed in the chapter on crash risks of this report.²²⁶

Motorcycle Awareness Week

- 5.16 Motorcycle Awareness Week (MAW) is a campaign to raise the awareness of drivers and motorcyclists on the road, as well as to raise the awareness of riders to risk management.²²⁷ MAW includes a wide range of events and takes place around mid-October each year to coincide with the start of the summer motorcycle riding season.²²⁸ The week usually starts with a launch in the Sydney CBD, followed by other promotional and educational events in regional areas such as Albury, Lithgow and Lismore.
- 5.17 The CRS has sponsored and supported MAW both financially and non-financially for a number of years. Support includes providing road safety promotional material, safety advice and attending particular launches and events. The submission notes that the NSWPF's Motorcycle Response Team is a participant in certain MAW activities.²²⁹
- 5.18 Although Transport for NSW did not refer to any specific evaluation of MAW, the submission points out that MAW and the NSW Motorcycle Safety Strategy have common education and awareness raising objectives. MAW enables the CRS to work closely with the motorcycle community to implement the Motorcycle Safety Strategy objectives.²³⁰

Other initiatives

- 5.19 In addition to these major educational initiatives, Transport for NSW stated that the State Insurance Regulatory Authority (SIRA) has assisted the Motorcycle Council of NSW Inc. with funds to produce a DVD about rider safety and the NSW Motorcycle Alliance with funding to distribute the *Good Gear Guide* throughout the motorcycle and scooter rider community²³¹.

Enforcement

- 5.20 In addition to education campaigns, Transport for NSW also emphasised the role of enforcement in improving rider behaviour. Transport for NSW reports that between 2012 and 2015, since the launch of the Strategy, the NSW

²²⁵ Transport for NSW, Centre for Road Safety, Answers to Questions taken on Notice, 2 November 2015, p. 11; see also Transport for NSW *Ride to Live* website, viewed 3 November 2015, <<http://testyourtiredself.com.au>>.

²²⁶ Submission 17, Transport for NSW, p. 53.

²²⁷ Submission 17, Transport for NSW, p. 77.

²²⁸ Motorcycle Council of NSW Inc. website, viewed 30 October 2015, <<http://www.mccofnsw.org.au/>>.

²²⁹ Submission 17, Transport for NSW, p. 77.

²³⁰ Submission 17, Transport for NSW, p. 77.

²³¹ Submission 17, Transport for NSW, pp. 43 - 44.

Police Force (NSWPF) has commenced over 62,900 legal actions against motorcycle riders. Such actions include the offences of speeding, vehicle standards, unlicensed riding and alcohol and drug offences. Transport for NSW has observed that these figures have remained largely consistent over the past three years.²³²

- 5.21 Given that higher rates of speed-related motorcyclist fatalities, relative to motor vehicle fatalities are a cause for concern in NSW and many other jurisdictions, NSWPF has specifically targeted enforcement of speed limits on popular motorcycle routes.²³³ Nevertheless, some members of the public expressed the view that more should be done about speeding of motorcyclists. For instance, in their submission, Mark and Donna Lee stated motorcyclists should not be allowed to travel at the same speed as cars. They highlighted that in many other countries, motorcycles have lower speed limits than cars on freeways.²³⁴
- 5.22 Overall, with greater resources being focussed on enforcement since the Traffic and Highway Patrol Command became operational in 2012, the submission from Transport for NSW notes that, aberrant or high risk behaviour appears to have decreased.²³⁵
- 5.23 Yet, the Transport and Road Safety Research Centre (TARS) at the University of New South Wales has stressed that there is no room for complacency with regard to targeting high risk behaviour.²³⁶ TARS has pointed to its retrospective research, which suggests that approximately two in every three riders were undertaking some form of risky behaviour.²³⁷ TARS expressed the view that: ‘...Targeting high risk behaviour will provide the best return for dollars invested (cost - benefit ratio) over all other proposed countermeasures.’²³⁸

Price incentives

- 5.24 In addition to education and enforcement strategies, adequate price incentives can also play a role in encouraging desirable rider and other motorist road behaviour. The NSW Compulsory Third Party (CTP) scheme has an integral role in that context.
- 5.25 CTP is a scheme, which is administered by the State Insurance Regulatory Authority (SIRA) and which prescribes that motor vehicle owners are required to purchase CTP insurance known as Green Slip. SIRA offers a complimentary price comparison service and encourages motorists to ‘shop around’ for their Green Slip.²³⁹

²³² Submission 17, Transport for NSW, p. 53.

²³³ Submission 17, Transport for NSW, p. 53.

²³⁴ Submission 2, Mark and Donna Lee, pp. 4 -5.

²³⁵ Submission 17, Transport for NSW, p. 61.

²³⁶ Submission 22, The Transport and Road Safety Research Centre (TARS), University of New South Wales, p. 13.

²³⁷ Submission 22, The Transport and Road Safety Research Centre (TARS), University of New South Wales, p. 13.

²³⁸ Submission 22, The Transport and Road Safety Research Centre (TARS), University of New South Wales, p. 13.

²³⁹ Submission 17, Transport for NSW, p. 42.

- 5.26 The Committee was interested to find out whether the insurance companies use any price signals to reward good riders. SIRA explained that
- (1) The CTP scheme in New South Wales is underwritten by seven private insurers.
 - (2) The licensed insurers set their own Green Slip premiums based on a detailed assessment of all available industry data and their claims experience, within Guidelines set by the SIRA.
 - (3) The prices for different types of vehicles reflect the cost and frequency of injury claims against a particular vehicle class (for example, five different motorcycle categories, standard passenger vehicle, and taxi) in one of five CTP rating districts.²⁴⁰
- 5.27 Having set the base Green Slip price, CTP insurers use a variety of risk-rating factors to offer a discount to drivers or riders considered to have a low risk profile or to impose a loading on those with a higher risk profile. The CTP insurers use the age of the owner or driver as the primary risk-rating factor. A number of the insurers also consider driver or rider safety record when setting their Green Slip prices.²⁴¹
- 5.28 In identifying safe drivers or riders, the insurers may consider factors such as the number of at-fault accidents in which the driver or rider has been involved, their record of traffic offences, their comprehensive insurance claims history including no-claim bonus status and the number of demerit points recorded against the driver's or rider's licence.²⁴²
- 5.29 The Committee was also interested to know whether there would be particular implications in the pricing of CTP insurance in the case of particular groups of riders, such as returning riders, who have been identified as a vulnerable group of riders in a number of submissions. SIRA advised that currently none of the CTP insurers uses a rider's riding history as a risk-rating factor. It stated that while an insurer may take into account any objective risk-rating factor when deciding whether to offer a rider a discount or to impose a loading, there would be practical difficulties in determining whether a rider is a continuing or returning rider. SIRA noted that: 'the current ranges of risk-factors used by insurers are regarded as reasonable proxies for a rider's potential risk of injuring other road users.'²⁴³

SAFER DRIVER BEHAVIOUR

- 5.30 The 'Safe People' section of the Motorcycle Safety Strategy states that in around two thirds of crashes involving a collision between a motorcycle and another motor vehicle, the key vehicle was the other motor vehicle. The 'Safe People' agenda therefore includes a focus on driver behaviour in interactions with motorcyclists. Driver behaviour was identified as a key

²⁴⁰ State Insurance Regulatory Authority, Answers to Questions on Notice, 20 October, 2015, p. 1.

²⁴¹ State Insurance Regulatory Authority, Answers to Questions on Notice, 20 October, 2015, p. 1.

²⁴² State Insurance Regulatory Authority, Answers to Questions on Notice, 20 October, 2015, p. 1.

²⁴³ State Insurance Regulatory Authority, Answers to Questions on Notice, 20 October, 2015, p. 1.

issue in consultations with the motorcycle community in the development of the Motorcycle Safety Strategy.²⁴⁴

- 5.31 The main initiative of the driver education segment of the Strategy is to develop a campaign and other information material promoting safe interaction between motorcyclists and other motor vehicles. Specific Actions for the First Three Years are to:
- (1) Use existing campaigns (for example, the 'Check Twice' for Bikes campaign) to build awareness of the presence of motorcyclists by other road users, especially drivers.
 - (2) Investigate safety impacts of measures addressing congestion and motorcycle interactions with other road users (for example, lane filtering).²⁴⁵
- 5.32 Mr Bernard Carlon, Acting Executive Director, Centre for Road Safety (CRS), Transport for NSW, informed the Committee that '...We have made quite a significant effort in communication and education resources being applied to motorists in terms of them being aware of motorcycle riders on the road.' He said that there were strong messages on RMS carriageways focussing on the shared responsibility of motorcyclists, motor vehicle drivers, trucks and buses with regard to the safety of motorcyclists.²⁴⁶
- 5.33 In its submission to the inquiry, Transport for NSW provided an update on the implementation of the education campaigns, targeted at drivers. The following sections outline the progress which has been reported so far.

Communication and education campaigns

Check Twice for Bikes

- 5.34 Transport for NSW explained in its submission that the 'Check Twice for Bikes' campaign was an early initiative announced in June 2011, prior to the release of the NSW Motorcycle Safety Strategy. At that time, the campaign was expanded to further educate drivers on the need to check for motorcyclists on the road.
- 5.35 The submission notes that the Motorcycle Safety Strategy builds on programs, such as 'Check Twice for Bikes', with new research and development to establish and deliver on new initiatives during the period 2012-2021.²⁴⁷
- 5.36 Transport for NSW did not provide a specific evaluation of this campaign. However, other evidence suggests that there is a need for ongoing education of drivers to reinforce the message about checking twice. For instance, the Motorcycle Council of NSW Inc. made the point in its submission that:

²⁴⁴ Transport for NSW, *NSW Motorcycle Safety Strategy 2012-2021*, p. 18.

²⁴⁵ Transport for NSW, *NSW Motorcycle Safety Strategy 2012-2021*, p. 18.

²⁴⁶ Mr Carlon, Evidence, 12 October 2015, p. 6.

²⁴⁷ Submission 17, Transport for NSW, p. 63.

'It is not that drivers do not see motorcycles, they do not look for motorcycles.'²⁴⁸

- 5.37 The submission expressed the view that drivers need to be educated to physically look twice for bikes. In its opinion, better education and training of drivers would prove effective in reducing the number of multi vehicle collisions involving motorcycles.²⁴⁹

Ride to Live campaign

- 5.38 Attitudinal Research was undertaken in 2012 to determine what campaign messages would be needed to address rider/driver behaviour. This research found that visibility and inattention were key concerns for both motorcyclists and drivers. Both groups also thought that drivers and riders shared equal responsibility for the safety of motorcycle riders. The research reinforced the importance of acknowledging both rider and driver responsibility without imparting blame on any one party.²⁵⁰ As a result, the *Ride to Live* campaign was developed.
- 5.39 The *Ride to Live* television campaign incorporates 30 second television advertisements including a message projection which states: *Check your Blind Spot and Help Motorcyclists Ride to Live.*^{251,}
- 5.40 Key findings from online surveys of drivers included: a) strong levels of recall of the messages; b) strong agreement that drivers need to look for motorcyclists and be aware of the risk they pose to riders; c) an identified behavioural change with drivers who had been exposed to the campaign, indicating that they specifically looked out for motorcyclists on the road compared to the responses received from drivers who had not been exposed to the campaign.²⁵²

Professional Training & Driver Syllabus

- 5.41 A recurrent theme throughout the inquiry was the need to change the driver syllabus to systematically train driver observation skills and awareness of vulnerable road users such as motorcyclists.
- 5.42 For instance, the National Motorcycle Alliance commented that car drivers are in control of a potential 'lethal weapon' yet are not required to undertake professional training. Car drivers can learn bad habits from their parents or supervisors, who are not trained instructors. This is different to the requirements for motorcycle riders who are obliged to undertake professional training to obtain their licence.²⁵³
- 5.43 Mr David Cooke, General Manager, National Motorcycle Alliance, suggested that training is not sufficiently acknowledged as a solution in the case of current road safety campaigns. He described the current situation as follows:

²⁴⁸ Submission 15, The Motorcycle Council of NSW Inc., p. 6

²⁴⁹ Submission 15, The Motorcycle Council of NSW Inc., p. 6.

²⁵⁰ Submission 17, Transport for NSW, p. 68.

²⁵¹ Submission 17, Transport for NSW, p. 69.

²⁵² Submission 17, Transport for NSW, p. 71.

²⁵³ Submission 10, National Motorcycle Alliance, p. 5.

To get a driver's licence now you have to do 100 hours or 110 hours in the car with your parents. So we have a bunch of kids learning to drive from their parents, who cannot drive either. There is no professional training anywhere in the loop. So no-one is getting taught good road craft. The learners are only getting taught the impatience and bad habits of their parents.²⁵⁴

- 5.44 The Motorcycle Alliance has urged that all road users undergo professional training.²⁵⁵
- 5.45 A survey of motorcyclists recently undertaken by the National Motorcycle Alliance found that riders nominated the behaviour of other road users as one of the biggest threats to their safety. Respondents were evenly split as to whether driver distraction, poor skills, poor attitude or lack of awareness were the main contributors to drivers making errors which put riders in danger.²⁵⁶
- 5.46 The Federal Chamber of Automotive Industries (FCAI) has also urged greater attention in future on driver education. In its submission, FCAI has stated that:
- The current work being done in NSW is very good, and very encouraging. The campaigns targeting motorcyclists is effective and being received well by them. However, the area where these communications and education plans are falling short are the ones that should be directed at car drivers, and particularly learner car drivers...²⁵⁷
- 5.47 Submissions received from individual members of the public also expressed concern about the lack of required professional training for car drivers²⁵⁸ and their need for further education on sharing the road with motorcyclists.²⁵⁹
- 5.48 For instance, Mr Lazare Sachs recommended that all learner drivers be tutored by a qualified driving instructor from an accredited driving school, not by a family member.²⁶⁰
- 5.49 Ms Fiona Field, whose son sustained serious injuries when his motorcycle was hit by a car at an intersection, urged the need for drivers to be educated on sharing the roads with motorcyclists and for them to be made aware of the consequences of a lapse in concentration. She suggested that a driver who caused a serious injury to a motorcyclist should be required to undertake additional driver training.²⁶¹

²⁵⁴ Mr David Cooke, General Manager, National Motorcycle Alliance, Transcript of evidence, 12 October 2015, p. 37.

²⁵⁵ Submission 10, National Motorcycle Alliance, p. 5.

²⁵⁶ Submission 10, National Motorcycle Alliance, p. 14.

²⁵⁷ Submission 8, Federal Chamber of Automotive Industries, p. 5.

²⁵⁸ Submission 20, Mr Lazare Sachs, p. 1.

²⁵⁹ Submission 6, Ms Fiona Field, p. 1.

²⁶⁰ Submission 20, Lazare Sachs, p. 1.

²⁶¹ Submission 6, Ms Fiona Field, p. 1.

Motorcycle-specific Driver Education

- 5.50 The Committee was interested as to whether motorcycle-specific questions are included in the driving licensing test and whether motorcycle awareness content is included in the training syllabus for learner drivers.²⁶²
- 5.51 Transport for NSW informed the Committee that the Driver Knowledge Test does include a motorcycle specific question for drivers. The Driver Knowledge Test covers the interaction between motor vehicle drivers and motorcycle riders and the inherent low conspicuity risk of motorcycles.²⁶³
- 5.52 Transport for NSW also informed the Committee that there are a number of information handbooks available to learner drivers during the licensing process. These refer to motorcycle-specific issues such as the higher crash and fatality risk, physical vulnerability and low conspicuity of motorcycles.²⁶⁴
- 5.53 The handbooks also identify potential hazards when sharing the road with motorcycle riders, including high risk situations for colliding with a motorcycle, such as at intersections. In addition, there are specific safety tips, including 'head checks' to check for blind spots, allowing adequate space in lane sharing and the need to travel at a safe distance to allow for motorcycle braking times.²⁶⁵
- 5.54 According to Transport for NSW, learner drivers have the additional option of undertaking the 'Safer Drivers Course' which involves a three-hour facilitated group discussion to help learner drivers better understand risks and safe driving behaviours. This is followed by a two-hour in-vehicle coaching session to help them manage risks on the road and to learn safe driving techniques.²⁶⁶
- 5.55 Mr Bernard Carlon, Acting Executive Director, Centre for Road Safety (CRS), also advised that the requirement of 120 hours of driving experience for learner drivers under 25 years of age is designed to maximise safer driving practices. He pointed out that to upgrade to a provisional P1 licence, learner drivers need to have successfully undertaken a comprehensive on-road driving test that assesses a number of key skills including an ability to safely interact with other road users such as motorcycle and bicycle riders.²⁶⁷

Penalties

- 5.56 Another issue concerning driver behaviour was the threat of penalties as a deterrent to instil a sense of responsibility in both riders and drivers equally.
- 5.57 For example, the Motorcycle Council of NSW Inc. noted that the penalty for speeding for a rider, where nobody was injured, means an instant loss of

²⁶² Dr Mehreen Faruqi MLC, Transcript of evidence, 12 October 2015, p. 6.

²⁶³ Transport for NSW, Centre for Road Safety, Answers to Questions on Notice, 2 November 2015, p. 1.

²⁶⁴ Transport for NSW, Centre for Road Safety, Answers to Questions on Notice, 2 November 2015, p. 1.

²⁶⁵ Transport for NSW, Centre for Road Safety, Answers to Questions on Notice, 2 November 2015, p. 1.

²⁶⁶ Transport for NSW, Centre for Road Safety, Answers to Questions on Notice, 2 November 2015, p. 1.

²⁶⁷ Transport for NSW, Centre for Road Safety, Answers to Questions on Notice, 2 November 2015, p. 1.

licence. This compares with a driver causing injury to another party being penalised with a loss of three points and a small fine.²⁶⁸ Mr Christopher Burns, Vice-Chairman, Motorcycle Council of NSW Inc., highlighted the imbalance of penalties when an accident occurs between a motorcycle and another motor vehicle. He described the situation

... of a rider who stopped at an amber light as the road rules designate. The rider was mown down by the driver behind him, who received no fine and no penalty—not even a slap on the wrist. The errant driver received nothing in the way of penalty. How does this instil some sense of responsibility in drivers, let alone riders?²⁶⁹

- 5.58 Mr Burns stated his belief that: ‘...if you injure a party in a multi-vehicle accident you should lose your licence for three months.’ He said that in order to generate social change, there was a need for ‘...some sort of system that the person knows exactly what their actions did.’²⁷⁰
- 5.59 Professor Raphael Grzebieta, Professor of Road Safety, Transport and Road Safety Research Centre (TARS), University of New South Wales, agreed with the proposition that penalties should be equally enforced between riders and drivers, depending who was at fault.²⁷¹

Positive Reinforcement

- 5.60 Notwithstanding the arguments that have been presented regarding the need to penalise poor driver behaviour, it is also important to acknowledge the value of positive messages that identify and celebrate examples of good behaviour on the road.
- 5.61 For instance, the submission of the Survive the Ride Association of NSW (STRA NSW) notes the significant improvement in rider performance which has occurred because of a combination of factors. These include advances in rider and driver education, Police enforcement, road maintenance, protective clothing and vehicle technology have all contributed to the gradual improvement in both driver and rider performance.²⁷²
- 5.62 These improvements, the STRA NSW stated, need to be publicly acknowledged. The submission notes that:
- ‘... it is a well-known principle in marketing that positive reinforcement for the desired behaviour is significantly more cost effective in generating further improvements than highlighting the rare undesired outcome.’²⁷³

²⁶⁸ Submission 15, The Motorcycle Council of NSW Inc., p. 24.

²⁶⁹ Mr Christopher Burns, Vice-Chairman, Motorcycle Council of NSW Inc., Transcript of evidence, 12 October 2015, p. 40.

²⁷⁰ Mr Burns, Evidence, 12 October 2015, p. 44.

²⁷¹ Professor Raphael Grzebieta, Professor of Road Safety, Transport and Road Safety Research Centre (TARS), University of New South Wales, Transcript of evidence, 12 October 2015, p. 50.

²⁷² Submission 11, Survive the Ride Association of NSW, p. 3.

²⁷³ Submission 11, Survive the Ride Association of NSW, p. 3.

OTHER INITIATIVES AND PROGRAMS

Lane filtering

- 5.63 In its Motorcycle Safety Strategy 2012-2021, Transport for NSW identified a need to investigate safety impacts of measures addressing congestion and motorcycle interactions with other road users, and highlighted lane filtering as a key area of concern.²⁷⁴
- 5.64 Lane filtering is when a motorcycle rider moves alongside vehicles that have either stopped or are moving slowly (less than 30 km/h).²⁷⁵
- 5.65 In order to address this, Transport for NSW has undertaken a trial into lane filtering, which has led to legislative changes that has seen the introduction of new laws to legalise motorcycle lane filtering under strict safety conditions.²⁷⁶ These changes have also been accompanied by a communications campaign, to inform road users about the new laws.

Lane Filtering Laws and the Communications Campaign

- 5.66 The new lane filtering laws came into effect on 1 July 2014.²⁷⁷ The laws have made lane filtering legal for fully-licenced motorcyclists who are travelling at less than 30 km/h when traffic is either stationary or slow moving, and when it is judged safe to do so.²⁷⁸
- 5.67 Under the new lane filtering laws, 'lane splitting', the dangerous behaviour where a motorcycle rider moves past vehicles unsafely at a speed faster than 30km/h, has also been classified as an offence.²⁷⁹ Motorcyclists who are caught engaging in lane splitting face a \$637 fine and 3 demerit points.²⁸⁰
- 5.68 Transport for NSW also piloted a communications campaign to inform the public about the new lane filtering laws. It began on 23 June 2014 and ran until 11 October 2014. It targeted all road users, to ensure safer interactions between motorcycle riders and other road users under the new legislation.²⁸¹
- 5.69 The key messages of the campaign were: the nature of the new laws; what lane filtering involves; how to lane filter safely, and; the increased importance of checking twice for motorcycles.²⁸² The campaign was delivered across the following channels: radio; digital; outdoor advertising; promotion through government announcements, event appearances and

²⁷⁴ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 – 2021*, p. 18.

²⁷⁵ Centre for Road Safety, *Lane filtering*, viewed 12 October 2015, <<http://roadsafety.transport.nsw.gov.au/stayingsafe/motorcyclists/lanefiltering>>.

²⁷⁶ Submission 17, Transport for NSW, p. 71.

²⁷⁷ Submission 17, Transport for NSW, p. 74.

²⁷⁸ Centre for Road Safety, *Lane filtering*, Transport for NSW, last updated 15 July 2015, viewed 16 September 2015, <<http://roadsafety.transport.nsw.gov.au/stayingsafe/motorcyclists/lanefiltering>>.

²⁷⁹ Submission 17, Transport for NSW, p. 74.

²⁸⁰ Submission 17, Transport for NSW, p. 74.

²⁸¹ Submission 17, Transport for NSW, p. 76.

²⁸² Submission 17, Transport for NSW, p. 76.

media announcements, and; variable message signs by Roads and Maritime Services regions at strategic locations.²⁸³ An animated video that was integral to the campaign received over 56,000 views on YouTube, and reached over 388,000 people on the NSW Police Facebook page by 20 August 2015.²⁸⁴

The impact of lane filtering

5.70 The new lane filtering laws are believed to have benefited NSW the community. Notable feedback from the submissions which the Committee received included the following:

- (1) According to Transport for NSW, many riders within the motorcycling community believe that lane filtering can help reduce their risk of enduring rear end crashes and that this has been one of the factors for the introduction of these laws.²⁸⁵ The NSW Motorcycle Branch of the Shooters and Fishers Party argued that 'lane filtering has improved the safety of riders'.²⁸⁶ The fact that NSW Police has not indicated any major safety concerns with the new laws suggests that lane filtering has contributed to increased road safety in NSW.²⁸⁷
- (2) The other intended impact of the lane filtering laws was to address congestion. While it may be too early to make any assessments in this regard, Ian Faulks, partner at Safety and Policy Analysis International, predicts that more drivers will realise that they could reduce their travel time and costs, and switch over to a powered two wheeler (PTW).²⁸⁸ He further stated that the new laws should mean drivers and riders alike experience smoother traffic flows on NSW roads over time.²⁸⁹

5.71 Despite their stated actual and potential benefits, a number of submissions raised concern over new lane filtering reforms, particularly over the impact on other road users. These include:

- (1) That the new lane filtering laws pose an increased risk to pedestrians who are crossing roads, who may not be able to see, or be seen by, motorcyclists who are lane filtering.²⁹⁰
- (2) That motorcycle lane filtering is seen as a privilege that motorcyclists have over drivers on the road, which has led to unsafe riding practices. These include motorcyclists lane filtering too close to cars, neglecting

²⁸³ Submission 17, Transport for NSW, p. 76.

²⁸⁴ Submission 17, Transport for NSW, p. 76.

²⁸⁵ Submission 17, Transport for NSW, p. 75.

²⁸⁶ Submission 4, Shooters and Fishers Party NSW Motorcycle Branch, p. 11.

²⁸⁷ Submission 17, Transport for NSW, p. 75.

²⁸⁸ Submission 19, Safety and Policy Analysis International, p. 9.

²⁸⁹ Submission 19, Safety and Policy Analysis International, p.9.

²⁹⁰ Submission 21, Pedestrian Council of Australia Ltd, p. 11.

to use indicators when changing lanes, and poorly interpreting when conditions are 'safe enough' to lane filter.²⁹¹

- 5.72 Other issues raised over the new laws include:
- (1) Many motorists remain unaware that lane filtering laws have come into effect.²⁹²
 - (2) A misplaced sense of territoriality and "road ownership" held by car drivers may cause them to continue to undertake unsafe driving practices targeted at motorcyclists. These include opening car doors as the motorcycle approaches them in traffic, or attempting to drag-race motorbikes from traffic lights.²⁹³
- 5.73 NSW became the first Australian jurisdiction to make motorcycle lane filtering legal.²⁹⁴ Other jurisdictions have since adopted lane filtering, based on the success of lane filtering trial and legislation in New South Wales.²⁹⁵ On 1 February 2015, Queensland brought their own lane filtering laws into effect,²⁹⁶ and the Australian Capital Territory began a territory-wide two-year trial of lane filtering.²⁹⁷ Victoria is currently investigating the viability of lane filtering regulations.²⁹⁸
- 5.74 The Committee was interested to learn how Transport for NSW and the NSW Police is monitoring the impact of the new lane filtering laws on the safety of road users. Transport for NSW advised that it is using a range of information sources, in consultation with NSW Police, to identify any safety impacts of the new laws. This includes reviewing lane splitting offence data, reviewing fatal crash reports to identify any crashes that may be related to lane filtering and ongoing Police monitoring of compliance with the new rules by motorcycle riders. Transport for NSW has also indicated that it will continue to review crash data to identify whether there has been any major change in crash patterns for motorcycle riders since the new laws were introduced.²⁹⁹

Road Safety Officers' Program

- 5.75 Evidence presented to this inquiry has pointed to the valuable role played by local councils' Road Safety Officers (RSOs) in educating road users about risk

²⁹¹ Submission 2, Mark and Donna Lee, p.3.

²⁹² Submission 4, Shooters and Fishers Party NSW Motorcycle Branch, p.11.

²⁹³ Submission 19, Safety and Policy Analysis International, p. 9.

²⁹⁴ Submission 17, Transport for NSW, p. 71.

²⁹⁵ F. Page, *Motorcycle Lane Filtering to start in ACT in February 2015*, The Canberra Times, 29 August 2014, viewed 16 September 2015, <<http://www.canberratimes.com.au/act-news/motorcycle-lane-filtering-to-start-in-act-in-february-2015-20140829-109xoj.html>>.

²⁹⁶ S. Rewald, *Myth Busters – Lane Filtering*, myPolice Bundaberg, 9 February 2015, viewed 29 October 2015, <<http://mypolice.qld.gov.au/bundaberg/2015/02/09/myth-busters-lane-filtering>>.

²⁹⁷ F. Page, *Motorcycle Lane Filtering to start in ACT in February 2015*, The Canberra Times, 29 August 2014, viewed 16 September 2015, <<http://www.canberratimes.com.au/act-news/motorcycle-lane-filtering-to-start-in-act-in-february-2015-20140829-109xoj.html>>.

²⁹⁸ Vicroads, *Motorcycle Lane Filtering*, 18 June 2015, viewed 16 September 2015, <<http://consult.vicroads.vic.gov.au/motorcycle-lane-filtering>>.

²⁹⁹ Transport for NSW, Centre for Road Safety, Answers to Questions on Notice, 2 November 2015, p. 15.

management and good behaviour on the road and in reinforcing the messages disseminated to the public as part of the NSW Road Safety Strategy and the Motorcycle Safety Strategy.³⁰⁰

- 5.76 RSOs are employed under the Local Government Road Safety Program (LGRSP) which aims to assist NSW councils to reduce the likelihood of deaths and injuries from road trauma in their local communities.³⁰¹
- 5.77 The LGRSP is a partnership program between Transport for NSW, RMS and local councils. Annual funding for the LGRSP is approximately \$5 million per year. This program provides funding contributions of up to 50 per cent toward local road safety projects or council RSO salaries. The program currently funds 76 RSO positions across 85 NSW councils, with some officers working across a number of councils.³⁰²
- 5.78 Under the LGRSP, councils prepare a Local Road Safety Action Plan (2014-2017) setting out proposed projects over the three years, based on local crash data analysis, council priorities, community feedback and the road safety priorities set out in the NSW Road Safety Strategy 2012-2021.^{303 304}
- 5.79 Transport for NSW has explained that the LGRSP is administered by Roads and Maritime Services regional road safety personnel who assist RSOs and local stakeholders to implement road safety projects. There is a particular focus on projects at the local level which support the *Ride to Live* motorcycle safety education campaign.³⁰⁵
- 5.80 The LGRSP Guidelines state that the program has a three year planning cycle (2014/15-2016/17) to allow for the longer term pursuit of a strategy.³⁰⁶ The program is currently in the middle of the second year of a three year funding cycle that ends on 30 June 2017.³⁰⁷
- 5.81 Mr Michael Savage, Manager, Roads and Transport Directorate, Institute of Public Works and Engineering Australasia' (IPWEA) NSW Division was concerned that RSOs are currently being underutilised and undervalued. He expressed the view that more certainty in employment would be needed if the RSO's role was to be fully viable.³⁰⁸ However, Transport for NSW has informed the Committee

³⁰⁰ Submission 14, Institute of Public Works Engineering Australasia Limited, NSW Division, p. 16; and Submission 19, Safety and Policy Analysis International, p. 2.

³⁰¹ Transport for NSW, *Local Government Road Safety Program 2014-2017 Guidelines*, updated February 2015, viewed 19 October 2015, < <http://roadsafety.transport.nsw.gov.au/downloads/local-gov-road-safety-program.pdf>>.

³⁰² Transport for NSW, Centre for Road Safety, Answers to Questions on Notice, 2 November 2015, p. 18.

³⁰³ Transport for NSW, *Local Government Road Safety Program 2014-2017 Guidelines*, updated February 2015, viewed 19 October 2015, < <http://roadsafety.transport.nsw.gov.au/downloads/local-gov-road-safety-program.pdf>>.

³⁰⁴ Submission 14, Institute of Public Works Engineering Australasia Limited, NSW Division, p. 16; and submission 19, Safety and Policy Analysis International, p. 2.

³⁰⁵ Transport for NSW, Centre for Road Safety, Answers to Questions on Notice, 2 November 2015, p. 18.

³⁰⁶ Transport for NSW, *Local Government Road Safety Program 2014-2017 Guidelines*, updated February 2015, viewed 19 October 2015, < <http://roadsafety.transport.nsw.gov.au/downloads/local-gov-road-safety-program.pdf>>.

³⁰⁷ Transport for NSW, Centre for Road Safety, Answers to Questions on Notice, 2 November 2015, p. 19.

³⁰⁸ Mr Michael Savage, Manager, Roads and Transport Directorate, Institute of Public Works and Engineering Australasia Limited, NSW Division, Transcript of evidence, 12 October 2015, p. 21.

that the LGRSP 'provides a very important contribution to road safety with the current intention for the program to continue into the future.'³⁰⁹

- 5.82 In its submission, IPWEA (NSW) recommended funding the LGRSP beyond the current three year cycle so that RSOs can continue working with local communities to address behavioural road safety factors with reference to motorcycle safety.³¹⁰
- 5.83 Mr Christopher Burns, Vice-Chairman, Motorcycle Council of NSW Inc., also informed the Committee that:
- ...There is a lack of funding, a lack of money, a lack of expertise, and a lack of peer support from the higher levels of Roads and Maritime Services. Brian Wood deals exclusively with the road safety officers, and I personally believe that they could do with more peer support and better quality assurance.³¹¹
- 5.84 The Committee sought additional information in relation to the 'long-term future plan with regard to the funding of the Road Safety Officers program'. Transport for NSW acknowledged the importance of the program as it 'provides a very important contribution to road safety' and stated that there is 'intention for the program to continue into the future'.³¹²

Conclusions

- 5.85 The Committee is pleased with the evidence it received in relation to educational campaigns that are targeted at improving rider behaviour. In particular, the stakeholder engagement process, and the partnerships developed with the rider community is an outcome that Transport for NSW can be satisfied with.
- 5.86 The Committee considers that enforcement plays an integral role in reducing motorcycle fatalities and is content that overall, high risk behaviour appears to have decreased. The suggestion that lower speed limits for motorcycles be introduced is not supported by evidence that any comparable country has this provision in place.
- 5.87 The Committee commends Transport for NSW its impressive public education campaigns promoting road safety education programs to riders, drivers and other road users.
- 5.88 The Committee is pleased to be informed by Transport for NSW that current driver training includes components which address the skills and level of awareness needed to share the road responsibly with more vulnerable users such as motorcyclists. However, the Committee agrees with the suggestions made in several submissions that the driver syllabus needs to be revised.
- 5.89 The Committee also endorses the view put forward that drivers should be required to undertake training which is delivered by qualified driving instructors as part of their licensing training. One option could be to mandate the 'Safer

³⁰⁹ Transport for NSW, Centre for Road Safety, Answers to Questions on Notice, 2 November 2015, p. 19.

³¹⁰ Submission 14, Institute of Public Works Engineering Australasia Limited (IPWEA), NSW Division, p. 17.

³¹¹ Mr Burns, Evidence, 12 October 2015, p. 42.

³¹² Transport for NSW, Centre for Road Safety, Answers to Questions on Notice, 2 November 2015, p. 19.

Drivers Course' and the two-hour in-vehicle coaching session. This could help to ensure that all motor vehicle drivers are aware of their obligation to share the road responsibly with vulnerable road users such as motorcyclists and that they have the necessary defensive driving skills to avoid presenting hazards to vulnerable road users.

- 5.90 The Committee agrees that road safety campaign messages that are designed to promote a sense of equal responsibility for safety on the road between riders and drivers, must be underpinned by the enforcement of penalties which are equally weighted and equally enforced on all parties. Such a measure would, in the Committee's view, help to achieve enduring social change in road users' attitudes and behaviour on the road.
- 5.91 For the above reasons, the Committee sees merit in inviting the injured motorcyclist to compile an 'injured party impact statement'. This would help to increase drivers' awareness of the impact of inattentive driving on motorcyclists.
- 5.92 The Committee acknowledges that Transport NSW has made progress in investigating and addressing congestion on NSW roads. The Committee recognises that the new lane filtering laws are intrinsic to this progress. The Committee recognises that while lane filtering has many benefits to motorcyclists and other road users, some risks to driver, rider and pedestrian safety remain. The Committee recognises that this may be partially due to a lack of awareness of the new laws and would therefore suggest that a second set of advertisements is required to increase awareness.
- 5.93 Evidence has been presented which suggests that Road Safety Officers employed under the Local Government Road Safety Program are not being fully utilised to assist with implementation of the *NSW Motorcycle Safety Strategy 2012 -2021* at the Local Government level.

RECOMMENDATION 10

The Committee recommends that Transport for NSW and Road and Maritime Services introduce a number of strategies to enhance driver skills and behaviour, including:

- 1. Revising the driver syllabus to incorporate training such as observation skills and abilities to recognise vulnerable road users such as motorcyclists; and**
- 2. Introducing an element of qualified driver training as part of the initial licensing and training of drivers, potentially by mandating the 'Safer Drivers Course' and the related two-hour in-vehicle coaching session.**

RECOMMENDATION 11

The Committee recommends that Transport for NSW and the Centre for Road Safety consider implementing a second set of advertisements to raise awareness of the new lane filtering laws.

RECOMMENDATION 12

The Committee recommends that Transport for NSW and Roads and Maritime Services examine options for providing long-term funding of the Local Government Road Safety Program.

Chapter Six – Safer vehicle, equipment and gear measures

6.1 The objective of the strategies under the ‘Safe Vehicles pillar’ of the *NSW Motorcycle Safety Strategy 2012-2021* is to reduce the number of motorcycle fatalities and the severity of injury in motorcycle crashes through protective clothing and safe motorcycle features.³¹³ Initiatives under this section of the Strategy include:

- (1) researching, developing and promoting accurate and reliable motorcycle safety information on motorcycle features, helmet standards and protective clothing;
- (2) monitoring Intelligent Transport Systems (ITS) which address stability and braking control;
- (3) researching safety features and safety ratings;
- (4) contributing to the National Road Safety Strategy including examining the scope for regulatory action to improve the stability, traction and braking standards on motorcycles; and
- (5) monitoring the National Road Safety Strategy’s investigation of automatic crash notification systems; as well as monitoring car design which does not obstruct visibility of bikes and monitoring ITS that can alert drivers to the presence of a motorcycle (vehicle to vehicle communication).³¹⁴

PROTECTIVE CLOTHING AND EQUIPMENT

6.2 Researching, developing and promoting accurate and reliable motorcycle safety information on motorcycle features, helmet standards and protective clothing has been identified as an action for the First Three Years Plan of the Strategy.³¹⁵

Uptake and usage

6.3 Australian research has provided strong evidence that motorcycle protective clothing reduces the risk of serious injury by 21 per cent.³¹⁶ Helmets remain the only motorcycle protective equipment which is mandatory in NSW.³¹⁷ Despite this, according to the Australasian College of Road Safety:

NSW has relatively high protective clothing usage rates compared to warmer areas of Australia such as Queensland. Most motorcyclists in NSW wear helmets (100%),

³¹³ *NSW Motorcycle Safety Strategy 2012-2021*, Safe Vehicles, pp. 21 – 24.

³¹⁴ *NSW Motorcycle Safety Strategy 2012-2021*, Safe Vehicles, pp. 21 – 24.

³¹⁵ *NSW Motorcycle Safety Strategy 2012-2021*, Safe Vehicles, pp. 21 – 24.

³¹⁶ Submission 12, NSW Chapter of the Australasian College of Road Safety, p. 10.

³¹⁷ Submission 17, Transport for NSW, p. 79.

JOINT STANDING COMMITTEE ON ROAD SAFETY
SAFER VEHICLE, EQUIPMENT AND GEAR MEASURES

motorcycle protective jackets (82%) and gloves (73%) and over half wear protective pants (56%) and boots (57%).³¹⁸

6.4 The Australasian College of Road Safety also noted that:

Scooter riders have the lowest rates of usage and this may be related to the way they are portrayed in advertising as not requiring the same levels of protection as motorcyclists.³¹⁹

6.5 Other organisations have also presented evidence suggesting that the low rate of protective clothing worn by scooter riders requires higher priority in education strategies.^{320 321}

Price barriers

6.6 Mr Bernard Carlon, Acting Executive Director, Centre for Road Safety, Transport for NSW, informed the Committee that protective clothing is fairly expensive and that this is one of the barriers preventing motorcyclists from wearing protective clothing.³²²

6.7 To address the price barrier, the Institute of Public Works Engineering Australasia Limited (IPWEA), NSW Division recommended that subsidies be provided (including discounts on insurance) to increase use, especially groups with a lower usage rate such as scooter riders.³²³

6.8 An alternative option for encouraging use, suggested by the Motorcycle Council of NSW Inc., would be removing the GST on motorcycle safety equipment. In addition, a Five Star rating scheme could be implemented for protective clothing as a two-pronged approach to removing current price barriers.³²⁴

Quality

6.9 Furthermore, the Committee learned that the range of reliable quality of protective clothing in the Australian market seems to be limited. In fact, recent research shows that a substantial proportion of protective clothing fails under crash conditions.³²⁵

6.10 Dr Elizabeth de Rome, Senior Research Officer, Neuroscience Research Australia and NSW Chapter Committee member of the Australasian College of Road Safety, informed the Committee that she had recently tested ten of the most commonly

³¹⁸ Submission 12, NSW Chapter of the Australasian College of Road Safety, p 10.

³¹⁹ Submission 12, NSW Chapter of the Australasian College of Road Safety, p 10.

³²⁰ Submission 14, Institute of Public Works Engineering Australasia Limited (IPWEA), NSW Division, p. 18.

³²¹ Mr Jack Haley, Senior Policy Adviser, NRMA Motoring and Services, Transcript of evidence, p. 29.

³²² Mr Bernard Carlon, Acting Executive Director, Centre for Road Safety, Transcript of evidence, 12 October 2015, p. 10.

³²³ Submission 14, Institute of Public Works Engineering Australasia Limited (IPWEA) NSW Division, p. 18.

³²⁴ Submission 15, Motorcycle Council of NSW Inc., p. 21.

³²⁵ Dr Elizabeth de Rome, Senior Research Officer, Neuroscience Research Australia and NSW Chapter Committee member of the Australasian College of Road Safety; Transcript of evidence, 12 October 2015, p. 16.

worn suits by Australian riders on an abrasion machine. She reported that: 'Two passed at the minimal level of the European Standard; eight failed miserably.'³²⁶

- 6.11 Dr de Rome further noted that it is difficult for women to find suitable protective gear due to the male-dominated nature of the Australian market.³²⁷

Good Gear Guide

- 6.12 The *Good Gear Guide* contains guidelines for motorcyclists on choosing safer clothing. It is an output of a national research project initiated in 2010 by the former Motor Accidents Authority (MAA), under the auspices of the Australian Heads of Compulsory Third Party (CTP) Insurance.
- 6.13 The project found that motorcycle riders sought information on both the injury prevention and thermal qualities of protective clothing.³²⁸ As a result, the *Good Gear Guide* was produced by Dr Elizabeth de Rome of LdeR Consulting for the Australian Government.³²⁹
- 6.14 To assist riders in choosing the best quality possible, Transport for NSW distributed the *Good Gear Guide* to the motorcycle training centres and members of the motorcycle community.³³⁰ In fact, the former MAA, provided funds to the motorcycle community to help with the distribution of the *Good Gear Guide* to motorcycle and scooter riders at venues along popular motorcycle routes and other relevant locations.³³¹

Standards and Regulation

- 6.15 The Committee learned that while there are European Standards for personal protective equipment (PPE), there are no equivalent Australian Standards.³³²
- 6.16 In the view of the NSW Chapter of the Australian College of Road Safety, motorcycle clothing is a global industry for which Australia is a very small market.³³³ If Australia develops a local standard, this may result in limiting the range of products available to Australian riders. The College also expressed the view that a standard would set a lowest common denominator, which would not provide the necessary market mechanism for manufacturers to improve their products.³³⁴
- 6.17 There was general agreement in the evidence presented by motorcycle organisations and road safety professionals that protective clothing should not be mandatory. Dr Elizabeth de Rome expressed the view that:

³²⁶ Dr de Rome, Evidence, 12 October 2015, p. 16.

³²⁷ Submission 12, NSW Chapter of the Australasian College of Road Safety, p. 10.

³²⁸ Submission 17, Transport for NSW, p. 44.

³²⁹ Submission 17, Transport for NSW, Attachment to Submission, *Good Gear Guide*, see rear page of Guide.

³³⁰ Mr Carlon, Evidence, 12 October 2015, p. 3.

³³¹ Submission 17, Transport for NSW, p. 44.

³³² Transport for NSW, Centre for Road Safety, Answers to Questions on Notice, 2 November 2015, p. 9.

³³³ Submission 12, NSW College of Road Safety, p. 10.

³³⁴ Dr de Rome, Evidence, 12 October 2015, p. 16.

If we mandate protective clothing—there is a big push for that—my fear is that we would create a market for fraudulently labelled garments, which would be brought in under our free trade agreements. You cannot deal with that. I really think the five-star rating is absolutely the way to go....³³⁵

- 6.18 Mr Bernard Carlon, Acting Executive Director, Centre for Safety, Transport for NSW, has informed the Committee that there is no intention to develop an Australian Standard. He further stated that it is currently envisaged that any motorcycle clothing rating system will be a consumer education program, where clothing is abrasive-tested to established European standards, and awarded star ratings depending upon the results.³³⁶

5 Star Rating System for Protective Clothing

- 6.19 Dr Elizabeth de Rome advised the Committee that Australia and New Zealand are currently working towards a star rating system for protective clothing, based on independent testing similar to the international New Car Assessment Program (NCAP). The project is led by the Transport Accident Commission (TAC) and supported by Transport for NSW, VicRoads, NRMA, RAC (WA) and RACV.³³⁷ The recommendation for this initiative also stems from the same study, which has recommended the development of the *Good Gear Guide*.³³⁸

- 6.20 The NSW Chapter of the Australasian College of Road Safety is a strong supporter of the star-rating system, having contributed a significant share of the research which has led to the establishment of the current stage of the project led by the Transport Accident Commission (TAC). The submission of the NSW Chapter of the Australasian College of Road Safety states that:

Instead of regulating protective clothing, successive government commissioned reports by the leading Australian road safety researchers in this field have recommended establishment of a rating system based on independent testing of the products available to consumers. These reports have recommended that products be tested for both protective and thermal management performance to ensure products are suitable for the Australian climate.³³⁹

The preferred and recommended approach is a star-rating system similar to the ANCAP model for cars which has proved highly successful in increasing the market for car safety features. The aim of a rating system is to use consumer demand to promote sales of better performing products.³⁴⁰

- 6.21 The NSW Chapter of the Australasian College of Road Safety has informed the Committee that the basic principles, which it would like to have incorporated in the business model for the Five Star Rating Scheme include that:

- (1) Products to be purchased anonymously and tested by an independent body under contract to the administering agency/-ies.

³³⁵ Dr de Rome, Evidence, 12 October 2015, p. 16.

³³⁶ Transport for NSW, Centre for Road Safety, Answers to Questions on Notice, 2 November 2015, p. 9.

³³⁷ NSW Chapter of the Australasian College of Road Safety, Answers to Additional Questions, 19 October 2015, pp. 1- 2.

³³⁸ Submission 17, Transport for NSW, p. 44.

³³⁹ Submission 12, NSW Chapter of the Australasian College of Road Safety. p. 10.

³⁴⁰ Submission 12, NSW Chapter of the Australasian College of Road Safety. pp. 10 – 11.

(2) Funding to be by independent stakeholder agencies – CTP insurers, health insurance companies and motoring organizations.

(3) Program to be overseen by a steering committee of stakeholders including representatives of the industry and rider community.³⁴¹

6.22 The NSW Chapter of the Australasian College of Road Safety has suggested that an organisation such as the Australian consumer organisation, Choice, may be an appropriate body to manage the scheme. It notes that this organisation has an established, credible, consumer advocacy profile and communications channels through Choice magazine and its website.³⁴²

6.23 The NSW Chapter of the Australasian College of Road Safety has also pointed to the potential benefits for Australian and New Zealand clothing manufacturers when a star rating system is eventually implemented. The College has commented that:

...Motorcycle protective clothing is an international industry with the majority of products manufactured overseas and Australian-owned brands representing a minority of products. In addition to creating a local market for higher quality protective clothing for Australian and New Zealand riders, a star-rating system would potentially enhance the export market for Australian star-rated clothing in the international market and in turn improve the clothing available to riders world-wide.³⁴³

Progress with the 5 Star Rating System

6.24 Mr Bernard Carlon informed the Committee that the Transport Accident Commission (TAC) in Victoria is still progressing this project. The NSW Centre for Road Safety is jointly financing the TAC project.³⁴⁴

6.25 The NSW Chapter of the Australasian College of Road Safety has expressed concern about the length of time it has taken to develop the proposal for a rating system for protective clothing. It informed the Committee that:

The NSW Centre for Road Safety is one of the stakeholders involved in the steering committee and has contributed considerable funding to the development work for the scheme, which is led by the Victorian Transport Accidents Commission (TAC). However the process has been extremely slow and it is now 10 years since the 5-star rating scheme for protective clothing was first proposed at an industry seminar coordinated by the MAA and MCC of NSW.³⁴⁵

6.26 While in support of the development of a Five Star rating scheme, the Motorcycle Council of NSW Inc. has indicated concern within the motorcycle community about the lack of stakeholder representation within the working group currently

³⁴¹ NSW Chapter of the Australasian College of Road Safety, Answers to Additional Questions, 19 October 2015, pp. 1-2.

³⁴² NSW Chapter of the Australasian College of Road Safety, Answers to Additional Questions, 19 October 2015, pp. 1-2.

³⁴³ NSW Chapter of the Australasian College of Road Safety, Answers to Additional Questions, 19 October 2015, pp. 1-2.

³⁴⁴ Transport for NSW, Centre for Road Safety, Answers to Questions on Notice, 2 November 2015, p. 9.

³⁴⁵ NSW Chapter of the Australasian College of Road Safety, Answers to Additional Questions, 19 October 2015, pp. 1-2.

being led by the Transport Accident Commission (TAC). Mr Guy Stanford, Chair, Helmets Committee, Motorcycle Council of NSW Inc. informed the Committee that his organisation had been advocating the need for improvements in protective clothing since 2005. However, he stated that:

The whole motorcyclist community is a bit distressed that the Transport Accident Commission [TAC] is heading off in its own direction without any consultation with riders.³⁴⁶

HELMET STANDARDS AND USE

- 6.27 Researching, developing and promoting accurate and reliable motorcycle safety information on motorcycle features, helmet standards and protective clothing is an initiative under the Safe Vehicle section of the NSW Motorcycle Safety Strategy.³⁴⁷
- 6.28 During the three years of the Motorcycle Safety Strategy under review there has been continuous research and testing on helmets.³⁴⁸ Motorcycle helmets have been shown to reduce the risk of death by 42 percent and head injury by 69 percent.³⁴⁹

National Helmet Standard

- 6.29 Helmets are the only motorcycle protective equipment that is mandated in NSW, where the Road Rules 2014 require motorcycle riders and passengers to wear an approved helmet. Currently, approved helmets are limited to those that comply with the Australian/ New Zealand Standard AS/NZS 1698. At present, Australian Consumer Law only allows the sale of helmets that comply with the Australian Standard.³⁵⁰
- 6.30 As noted by the NSW Chapter of the Australasian College of Road Safety, regulation of helmet usage has proved highly effective in creating almost universal usage in NSW.³⁵¹ Research commissioned by the Centre for Road Safety found that 100 per cent of surveyed riders reported helmet use and 70 per cent wore a full-face helmet.³⁵²
- 6.31 Transport for NSW has produced educational materials to help riders to choose safety approved motorcycle helmets. The *Ride to Live* campaign website includes sections on motorcycle riding gear and helmet safety.³⁵³

Helmet Testing

- 6.32 Developing and implementing a national helmet assessment and rating program to stimulate market demand for the safest motorcycle helmets is specified in the

³⁴⁶ Mr Guy Stanford, Chair, Helmets Committee, Motorcycle Council of NSW Inc., Transcript of evidence, 12 October 2015, p. 43.

³⁴⁷ *NSW Motorcycle Safety Strategy 2012 -2021*, Safe Vehicles, Safety Initiative 14, p. 22.

³⁴⁸ Mr Carlon, Evidence, 12 October 2015, p. 3.

³⁴⁹ Submission 22, Transport and Road Safety Research Centre (TARS), University of New South Wales, p. 18.

³⁵⁰ Submission 17, Transport for NSW p. 78.

³⁵¹ Submission 12, NSW Chapter of the Australian College of Road Safety, p. 10.

³⁵² Submission 17, Transport for NSW, p. 57.

³⁵³ Submission 17, Transport for NSW p. 78.

National Road Safety Strategy 2011-2020 in its agenda of First Three Years Actions.³⁵⁴

- 6.33 Mr Bernard Carlon, Acting Executive Director, Centre for Road Safety (CRS), Transport for NSW informed the Committee that CRS is a major contributor to the Consumer Rating and Assessment of Safe Helmets program [CRASH], which evaluates and rates the relative safety performance of motorcycle helmets available in Australia.³⁵⁵
- 6.34 Established in 2010, CRASH is co-ordinated by CRS with additional funding from the NRMA and the Transport Accident Commission (TAC). According to the submission of Transport for NSW, CRASH provides independent and consistent information on the protection afforded and level of comfort provided by motorcycle helmets. Approximately 120 helmets have been rated to date.³⁵⁶

Revised definition, use and supply of 'approved motorbike helmet'

- 6.35 In response to the demand for a wider choice of helmets, the Centre for Road Safety established a helmet subgroup in 2013 to consult with the motorcycle community and investigate alternative helmet standards that are at least as safe as the current Australian standard. On the basis of this research, CRS is currently considering expanding the definition of "approved motorbike helmet" to include the United Nations Economic Commission for Europe (UNECE) 22.05 Standard.³⁵⁷
- 6.36 While Queensland and Victoria have recently expanded their definition of 'approved motorbike helmet' to include UNECE 22.05, NSW will undertake a more comprehensive approach to ensure that the helmets can not only be legally used but also legally supplied in NSW. Currently Australian Consumer Law only allows the sale of helmets that comply with the Australian Standard.³⁵⁸

Compliance marking

- 6.37 Transport for NSW states in its submission that it considers that helmets that comply with a standard (whether the Australian Standard or the UNECE Standard), should bear a compliance marking to make it readily identifiable and to enable enforcement of the correct helmets by Police.³⁵⁹
- 6.38 Transport for NSW has informed the Committee that it has been in discussions with the Joint Accreditation System of Australia and New Zealand, JAS-ANZ³⁶⁰ and the Australian Competition and Consumer Commission (ACCC) to ensure that its model to expand the motorcycle helmet standard is robust.³⁶¹

³⁵⁴ *NSW Motorcycle Safety Strategy 2012-2021, National Road Safety Strategy 2011-2020, First Three Years Actions*, p. 11.

³⁵⁵ Mr Carlon, Evidence, 12 October, 2015, p. 3.

³⁵⁶ Submission 17, Transport for NSW, p. 57.

³⁵⁷ Submission 17, Transport for NSW, pp. 77 -79.

³⁵⁸ Submission 17, Transport for NSW, p. 78.

³⁵⁹ Submission 17, Transport for NSW, p. 78.

³⁶⁰ Joint Accreditation System of Australia and New Zealand, JAS-ANZ, viewed 26 October 2015, < <http://www.jas-anz.com.au/about-us>>.

³⁶¹ Submission 17, Transport for NSW, p. 78.

- 6.39 Compliance marking will be of assistance to consumers considering the increasing range of helmets available on the Australian market. The submission of the Transport and Road Safety Research Centre (TARS) at the University of New South Wales has pointed out that international brands have become increasingly accessible due to the introduction of online retailing, globalisation and variable exchange rates³⁶².
- 6.40 TARS research indicates that although online and non-standard helmet use is currently low, online trading could jeopardise enforcement of the Australian standard. The TARS submission has advocated the need to assess whether there is scope to harmonise motorcycle helmet standards in view of international trade agreements, online purchasing and motorcycling growth.³⁶³

HIGH VISIBILITY GEAR & DAYTIME HEADLIGHTS

- 6.41 Working with motorcycle manufacturers to improve motorcycle visibility to other road users (conspicuity) and raising motorcyclists' awareness about how to make themselves visible to other road users on the road are among the actions listed under the Actions for the First Three Years in the Safe Vehicles section of the NSW Motorcycle Strategy.³⁶⁴
- 6.42 Mr Bernard Carlon, Acting Executive Director, Centre for Safety, Transport for NSW informed the Committee that:
- 'From our point of view, the visibility of riders is a complex set of issues that we need to come to grips with, including not just the clothing and the visibility of clothing but also day time running lights, which the majority of motorcycles have, technology, and education.'³⁶⁵

Dedicated Running Lights (DRLs)

- 6.43 The mandatory use of headlights or Dedicated Running Lights (DRLs) is one of the methods available to motorcyclists to boost their visibility to other road users. However, according to the evidence presented to this inquiry, the effectiveness of DRLs is not yet universally convincing.
- 6.44 The Institute of Public Works and Engineering Australasia Limited (IPWEA), NSW Division, for example, stated that there is a lack of supporting evidence regarding the effectiveness of DRLs in reducing crashes involving learners.³⁶⁶
- 6.45 Furthermore, the National Motorists Association of Australia noted that motorcycles can easily blend into the general array of lights and become invisible if the practice becomes more widespread among road users.³⁶⁷

³⁶² Submission 22, Transport and Road Safety Research Centre (TARS) University of New South Wales, p. 17.

³⁶³ Submission 22, Transport and Road Safety Research Centre (TARS) University of New South Wales, p. 17.

³⁶⁴ *NSW Motorcycle Safety Strategy 2012 – 2021*, Actions for First Three Years, p. 24.

³⁶⁵ Mr Carlon, Evidence, 12 October 2015, p. 10.

³⁶⁶ Submission 14, Institute of Public Works and Engineering Australasia Limited (IPWEA), NSW Division, p. 19.

³⁶⁷ Submission 13, National Motorists Association of Australia, p. 3.

High visibility gear

- 6.46 Another way to increase conspicuity of motorcycles is via high visibility clothing for riders, which was a recurring theme throughout the inquiry.
- 6.47 Some submissions pointed out that the popularity of dark bikes and black clothing, such as jackets, makes riders less visible.³⁶⁸ Therefore, several submissions called for high visibility clothing (such as yellow) being mandatory,³⁶⁹ and stressed its importance, particularly at night.³⁷⁰
- 6.48 Other submissions raised a number of concerns in relation to high visibility clothing:
- (1) Firstly, the issue of hi-visibility clothing losing its impact against different backgrounds and headlights was raised.³⁷¹
 - (2) Secondly, there was concern that high visibility clothing could give false sense of security to riders.³⁷²
 - (3) Thirdly, it was argued that high visibility would do little to address the issue of riders' knowledge and skills to properly position themselves on the road – an aspect of visibility, which is considered more important than the colour of riders' clothing.³⁷³
 - (4) Finally, the potential for a positive impact of high visibility was questioned in the absence of driver observation skills and awareness of motorcycles.³⁷⁴
- 6.49 Comparing the potential effectiveness of high visibility clothing versus daylight headlights, the Motorcycle Council of NSW Inc. noted that it finds the latter more effective as most multi-vehicle crashes occur from the front and because the headlight negates any benefit which could be provided by high-visibility clothing. As was explained by Mr Burns at the public hearing:

...the Motorcycle Accident In-Depth Study [MAIDS] undertaken in 2004 shows that about 80 per cent of multi-vehicle crashes occur from the front. We have a big headlight at the front. As seen in the photographs we have provided, that headlight negates any benefit that may or may not be provided by high-visibility clothing. There are photos of riders wearing high-visibility clothing. If the background is the wrong colour, they disappear. It is an ever-changing scenario. We are better off with

³⁶⁸ Submission 3, Mr Kenneth Levien, p. 1 and Submission 7, Mr Peter Lenaghan, p. 1.

³⁶⁹ Submission 3, Mr Kenneth Levien, p. 1.

³⁷⁰ Professor Raphael Grzebieta and Professor Anne Williamson, Transcript of Evidence, 12 October 2015, pp. 49-50.

³⁷¹ Submission 15, Motorcycle Council of NSW Inc, pp. 7-8 and Mr Christopher Burns, Vice-Chairman, Motorcycle Council of NSW Inc., Transcript of Evidence, 12 October 2015, pp. 42-43.

³⁷² Mr Michael Savage, Manager, Roads and Transport Directorate, Institute of Public Works and Engineering Australasia Limited (IPWEA) NSW Division, Transcript of evidence, 12 October 2015, p. 25; Mr David Cooke, General Manager, National Motorcycle Alliance, Transcript of evidence, 12 October 2015, p. 34.

³⁷³ Submission 15, Motorcycle Council of NSW Inc., pp. 7-8 and Mr Burns, Evidence, 12 October 2015, pp. 42-43.

³⁷⁴ Submission 10, National Motorcycle Alliance, pp. 5-6.

the headlight on. The policeman in Western Australia was wearing high-visibility clothing when he was run over from behind.³⁷⁵

- 6.50 Other submissions favoured use of a strobe light fitted to the handle bars or above the front guard to be activated by sudden braking as a measure to increase visibility in critical situations.³⁷⁶

Developments in other jurisdictions

- 6.51 In Victoria, since 1 July 2014, the Graduated Licensing Scheme (GLS) includes a mandatory requirement to wear a high visibility vest or jacket and a requirement for the headlight to be on at all times.³⁷⁷ Furthermore, a high-visibility clothing requirement has been operative in France since 1 January 2013.³⁷⁸

VEHICLE DESIGN

- 6.52 The Motorcycle Safety Strategy acknowledges that advances in motorcycle design have the potential to reduce the severity of crashes. These include the Anti-locking Braking Systems (ABS), fuel tank design and Intelligent Transport Systems (ITS) such as traction control.

Anti-lock braking (ABS)

- 6.53 Anti-lock Braking Systems (ABS) is a technology which is now available to control braking on motorcycles. ABS prevents the continued locking-up of (or skidding) of a wheel on the road surface with the potential to reduce the occurrence of accidents. In the case of a wheel locking, ABS would become activated and electronic sensors would detect the wheel lock-up and activate the ABS technology which would release braking pressure, allowing the wheel to turn again, thus maintaining stability of the motorcycle.³⁷⁹
- 6.54 Under the NSW Motorcycle Safety Strategy for Safe Vehicles, systems which address the stability and braking properties of a motorcycle are considered as having the highest priority with potential to enhance motorcycle safety in situations of high crash risk. Actions for the First Three Years of the NSW Strategy have included monitoring the uptake of ABS braking and contributing to the preparation of the national Regulatory Impact Statement (RIS).³⁸⁰
- 6.55 Anti-locking Braking (ABS) is considered to be advancement in motorcycle design, which has the potential to decrease motorcyclist crash rates.³⁸¹ Research suggests that ABS helps increase stability by preventing skidding and providing maximum braking efficiency on a range of road surfaces. With ABS, the braking force can be automatically adjusted to prevent the wheels locking in a critical

³⁷⁵ Mr Burns, Evidence, 12 October 2015, pp. 42-43.

³⁷⁶ Submission 5, Mr Ben O'Leary, p. 1; Submission 7, Mr Peter Lenaghan, p. 1.

³⁷⁷ Submission 14, Institute of Public Works and Engineering Australasia Limited (IPWEA), NSW Division, p. 18 and Submission 17, Transport for NSW, p. 82.

³⁷⁸ Submission 14, Institute of Public Works and Engineering Australasia Limited (IPWEA), NSW Division, pp. 18- 19.

³⁷⁹ Submission 8, Federal Chamber of Automotive Industries, p. 6.

³⁸⁰ *NSW Motorcycle Safety Strategy 2012-2021, Safe Vehicles*, p. 23.

³⁸¹ Submission 17, Transport for NSW, p. 59.

situation. ABS achieves this by detecting changes in the wheel speed arising from excessive braking pressure or a change in surface grip.³⁸²

National and international context

- 6.56 In Australia, at present, few motorcycles are fitted with ABS or the technologically equivalent systems.³⁸³ From 2016, ABS will be required on all motorcycles in Europe and this will have an impact on the Australian market.³⁸⁴ A number of motorcycle manufacturers, for example, BMW, have already provided ABS as a standard on their entire range.³⁸⁵
- 6.57 As an action under the National Road Safety Strategy,³⁸⁶ the Commonwealth Department of Infrastructure and Regional Development is currently preparing a Regulation Impact Statement (RIS) seeking support for mandating ABS on motorcycles supplied to the Australian market.³⁸⁷ Mr Bernard Carlon, Acting Executive Director, Centre for Safety, Transport for NSW has informed the Committee that the RIS is expected to be released towards the end of this year.³⁸⁸

Effectiveness of ABS

- 6.58 Evidence presented to this inquiry has indicated a range of views about the effectiveness of anti-lock braking systems (ABS). Professor Raphael Grzebieta, Professor of Road Safety, Transport and Road Safety Research Centre (TARS), University of New South Wales supported without reservation, legislative action to require ABS as well as ‘... any other systems that keep a motorcycle upright’.³⁸⁹
- 6.59 However, several submissions, while acknowledging the positive potential of ABS, urged caution and pointed to certain performance limitations requiring further consideration and research.³⁹⁰ For example, the Federal Chamber of Automotive Industries (FCAI) has stated that:
- ‘...it must be acknowledged that ABS is not desirable under certain riding conditions, such as off-road riding on unsealed roads, in typical trail or Enduro riding conditions.’³⁹¹
- 6.60 It has also cited research which has found that in many collisions, riders have failed to apply the brakes. It notes that unless the braking system is activated and used to near its maximum ability, ABS will have no effect.³⁹²

³⁸² Submission 17, Transport for NSW, p. 59.

³⁸³ Submission 17, Transport for NSW, p. 59.

³⁸⁴ Submission 17, Transport for NSW, p. 59; Submission 10, National Motorcycle Alliance/Motorcycling NSW, p. 6; Submission 15, Motorcycle Council of NSW Inc., p. 23.

³⁸⁵ Submission 17, Transport for NSW, p. 59.

³⁸⁶ *NSW Motorcycle Safety Strategy 2012-2021, National Road Safety Strategy 2011-2020, First Three Years Actions*, p. 11.

³⁸⁷ Submission 17, Transport for NSW, p. 59.

³⁸⁸ Transport for NSW, Centre for Road Safety, Answers to Questions on Notice, 2 November 2015, p. 16.

³⁸⁹ Professor Grzebieta, Evidence, 12 October 2015, p. 48.

³⁹⁰ Submission 8, Federation of Automotive Industries (FCAI), pp. 6-7; Submission 10, National Motorcycle Alliance/Motorcycling NSW, p. 6; Submission 14, Institute of Public Works Engineering Australasia Limited (IPWEA), NSW Division, pp. 19 - 20; Submission 15, Motorcycle Council of NSW Inc., pp. 21 – 23.

³⁹¹ Submission 8, Federation of Automotive Industries (FCAI) p. 7.

6.61 However, Mr Bernard Carlon, Acting Executive Director, Centre for Road Safety, Transport for NSW, has informed the Committee that the Regulatory Impact Statement (RIS) addresses those concerns:

... The RIS clearly indicates that the benefit for the whole motorcycle rider community is around a reduction of more than 30 per cent of fatalities and serious injuries. There is a debate about the off-road element of it or the very advanced rider element of it, but the RIS is pretty clear. It provides a significant improvement in the safety of those bikes and there have been significant improvements over the years in the safety of motorcycles.³⁹³

6.62 A new report of an evaluation of the effectiveness of ABS on motorcycle safety by Monash University Accident Research Centre has recently been released in September 2015.³⁹⁴ The report, commissioned by the Australian and Victorian governments, indicates that ABS could provide a 36 per cent overall reduction in fatal and severe injury crashes.³⁹⁵

Rationale for and the process of mandating ABS

6.63 Several submissions expressed a preference for incentives to encourage the uptake of ABS equipped motorcycles rather than taking a legislative approach, noting that Australian motorcycle market will be changed as a result of overseas legislative measures.³⁹⁶ Submissions have also urged the need for a public education campaign³⁹⁷ or government funded rider training³⁹⁸ if the positive benefits of ABS are to be fully realised.

6.64 The Motorcycle Council of NSW Inc. has urged further consultation with motorcycle rider groups in the development of the Regulation Impact Statement (RIS) in order to consider concerns such as the effectiveness of ABS in reducing crashes; the ability of ABS to cope with rough surfaces; and the costs involved in training riders to use ABS to best effect.³⁹⁹

³⁹² Submission 8, Federation of Automotive Industries (FAI) p. 7.

³⁹³ Mr Carlon, Evidence, 12 October 2015, p. 11.

³⁹⁴ Monash University Accident Research Centre, *Evaluation of the effectiveness of anti-lock braking systems on motorcycle safety in Australia*, September 2015, viewed 5 November 2015, <<http://www.monash.edu.au/miri/research/reports/muarc327.pdf>>.

³⁹⁵ Hon Paul Fletcher MP, Minister for Territories, Local Government and Major Projects, *ABS reduces motorcycle casualties by over 30 per cent*, media release, 7 October 2015, viewed 5 November 2015 <<http://paulfletcher.com.au/media-centre/media-releases/item/1454-abs-reduces-motorcycle-casualties-by-over-30-per-cent.html>>.

³⁹⁶ Submission 8, Federation of Automotive Industries (FAI) p. 6; Submission 10, National Motorcycle Alliance/Motorcycling NSW, p. 6; Submission 14, Institute of Public Works Engineering Australasia Limited (IPWEA), NSW Division, pp. 19- 20; Submission 15, Motorcycle Council of NSW Inc., p. 23 and p. 26.

³⁹⁷ Submission 14, Institute of Public Works Engineering Australasia Limited (IPWEA), NSW Division, p. 20;

³⁹⁸ Submission 10, National Motorcycle Alliance/Motorcycling NSW, p. 6; Submission 15, Motorcycle Council of NSW Inc., p. 21.

³⁹⁹ Submission 15, Motorcycle Council of NSW Inc., p. 21.

- 6.65 The Hon Paul Fletcher MP, federal Minister for Territories, Local Government and Major Projects has announced that consultations will be held with motorcycle user groups after the RIS has been released.⁴⁰⁰

Traction Control

- 6.66 Intelligent Transport Systems (ITS) have also been identified as a possible method of reducing the number and severity of motorcycle crashes, especially in relation to speeding, post-crash care and anti-lock braking. While the effectiveness of these systems is still being researched, it has been noted that ITS technology in motorcycles lags behind other vehicles such as cars.⁴⁰¹ Therefore, the National and NSW Motorcycle Safety Strategies include further research into ITS systems which could improve motorcycle safety.⁴⁰²
- 6.67 Traction control is an ITS technology which has been shown to help increase stability in motorcycles. This is an electronic system that optimises the motorcycle's grip and increases its stability by stopping wheel spin, even on slippery surfaces. Transport for NSW has advised that currently, traction control is only offered as an option on some motorcycles (e.g. BMW, Ducati) and there are no immediate plans to mandate it.⁴⁰³
- 6.68 Transport for NSW has informed the Committee that, as with ABS, traction control systems do provide controlled braking capacity for a motorcycle⁴⁰⁴ and that traction control is being considered at Commonwealth level, however the focus for now is on ABS.⁴⁰⁵

Fuel tank design

- 6.69 Another aspect of vehicle design, which was examined for its potential benefits in reducing the road trauma, is fuel tank design. During the three years of the Motorcycle Strategy under review, an in-depth crash study was managed by the Centre for Road Safety. This study observed that abdominal injuries commonly occurred subsequent to impact between the rider and the fuel tank.⁴⁰⁶
- 6.70 The study, which was conducted by Neuroscience Research Australia (NeuRA) on behalf of the Austroads Research Board, compared the characteristics of 102 riders involved in serious crashes against a case-control sample of 336 riders who used the same road location over a two-year period ending in 2014.⁴⁰⁷

⁴⁰⁰ Hon Paul Fletcher MP, Minister for Territories, Local Government and Major Projects, *ABS reduces motorcycle casualties by over 30 per cent*, media release, 7 October 2015, viewed 5 November 2015
<<http://paulfletcher.com.au/media-centre/media-releases/item/1454-abs-reduces-motorcycle-casualties-by-over-30-per-cent.html>. >

⁴⁰¹ *NSW Motorcycle Safety Strategy 2012-2021*, Safe Vehicles, p. 23.

⁴⁰² *NSW Motorcycle Safety Strategy 2012-2021*, Safe Vehicles, Actions for First Three Years, pp. 22 -23.

⁴⁰³ Submission 17, Transport for NSW, p. 59.

⁴⁰⁴ Mr Melvin Eveleigh, Manager, Safer Roads, Centre for Road Safety, Transport for NSW, Transcript of evidence, 12 October 2015, p. 5.

⁴⁰⁵ Mr Carlon, Evidence, 12 October 2015, p. 5.

⁴⁰⁶ Submission 17, Transport for NSW, p. 60.

⁴⁰⁷ Submission 17, Transport for NSW, p. 52.

- 6.71 An expert panel, convened to review the findings and recommend key issues and countermeasures has put forward a number of discrete technological countermeasures as possible lines of future investigation.⁴⁰⁸ These include improved fuel tank design and investigating the shape and characteristics of fuel tanks in terms of capacity to provide restraint and energy absorption.⁴⁰⁹
- 6.72 Transport for NSW is involved in consultations with the Federal Chamber of Automotive Industries and other jurisdictions to improve safety through motorcycle design.⁴¹⁰ Mr Bernard Carlon, Acting Executive Director, Centre for Road Safety (CRS), Transport for NSW, informed the Committee that CRS:
- ‘... will now have further conversations with the manufacturers around the design of the fuel tanks because there are issues around the pelvis injuries that are sustained in a crash, depending on the design of the fuel tank.’⁴¹¹
- 6.73 He said that the future focus would be on exploring the potential of continuous improvements in vehicle design and function to enhance motorcycle safety and reduce trauma.⁴¹²

Design of cars & Driver assistance systems

- 6.74 The Motorcycle Safety Strategy aims to address this risk, with the Safe Vehicles Safety Initiative to ‘Monitor and promote car design which does not obstruct visibility of motorcycles.’⁴¹³ While evidence presented to the Committee did not address this action, during the public hearing, Professor Grzebieta mentioned the Mobileye, vision-based advanced driver assistance systems (ADAS), which provides warnings for collision prevention and mitigation and is being widely used.⁴¹⁴

Conclusions

- 6.75 The evidence presented to this inquiry suggests that much has been achieved in raising motorcyclists’ awareness about protective clothing and the availability of other safety equipment and features which would help them to better manage risks on the road. However, there are still areas of concern, in particular the low rate of use of protective clothing by scooter riders.
- 6.76 Considering the close involvement of the State Insurance Regulatory Authority (SIRA) in the development and implementation of the Motorcycle Strategy, it could help to facilitate Compulsory Third Party insurance price signals to reward riders who choose protective clothing and safety equipment.
- 6.77 Reducing the GST on specific safety clothing, equipment and other features, as a way of encouraging uptake of protective clothing, is a matter beyond the scope

⁴⁰⁸ Submission 17, Transport for NSW, p. 52.

⁴⁰⁹ Submission 17, Transport for NSW, p. 60.

⁴¹⁰ Mr Carlon, Evidence, 12 October 2015, p. 3.

⁴¹¹ Mr Carlon, Evidence, 12 October 2015, p. 12.

⁴¹² Mr Carlon, Evidence, 12 October 2015, p. 12.

⁴¹³ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 – 2021*, p. 24.

⁴¹⁴ Professor Grzebieta, Evidence, 12 October 2015, p. 49. and <<https://en.wikipedia.org/wiki/Mobileye>> , viewed 29 October 2015.

of this inquiry. However, there may be scope for Transport for NSW to pursue this proposition in national consultations in relation to the *National Road Safety Strategy 2011-2020*.

- 6.78 In the absence of a standard or rating system for protective clothing, riders have sought better information on protective gear. The *Good Gear Guide* has clearly been very helpful in filling the information gap. The Committee is pleased to note that Transport for NSW has been able to progress information distribution in relation to protective clothing. The Staysafe Committee has previously recommended an awareness campaign on protective motorcycle clothing including point of sale advertising in its 2010 Report on Vulnerable Road Users.⁴¹⁵
- 6.79 The Committee is pleased to note that work is advancing towards the implementation of a star rating system for protective clothing. However, the Committee shares the concern of the NSW Chapter of the Australasian College of Road Safety that the process has been extremely slow. The Committee urges Transport for NSW to ensure that the next stage of the NSW Motorcycle Strategy includes specific actions in consultation with the Victorian Transport Accident Commission (TAC) to achieve implementation of a Five Star Rating Scheme for protective motorcycle clothing.
- 6.80 The Committee has concerns that the motorcycle community feels that it no longer has an opportunity to contribute to the development of the Five Star Rating Scheme in the project currently being led by the Victorian TAC. The Committee urges Transport for NSW to raise with TAC the need for measures to enable stakeholder input to the Australia and New Zealand consultations on a Five Star Rating Scheme.
- 6.81 On the evidence presented, it is clear that Transport for NSW has successfully accomplished its Actions for the First Three Years in relation to improving motorcycle helmet use. As has been highlighted by the Transport and Road Safety Research Centre (TARS), University of New South Wales, there is clearly a need to acknowledge that Australia is part of a global market and expand the accessibility of approved motorcycle helmets by harmonising the Australian Standard with equivalent international standards.
- 6.82 The expansion of the definition of 'an approved helmet' and the development of a compliance marking will undoubtedly be of benefit to NSW motorcyclists in selecting reliable safety helmets. Ongoing development of consumer education materials and campaigns regarding helmet standards and approved products must also be a high priority for the future.
- 6.83 The Committee agrees with Transport for NSW and other inquiry participants that the visibility of riders is a multi-faceted issue requiring a range of approaches. The Committee urges Transport for NSW to conduct further research into the effectiveness of daytime running lights (DRLs) as a measure which could possibly boost the visibility of motorcycle riders and to examine what other

⁴¹⁵ Joint Standing Committee on Road Safety (Staysafe), *Vulnerable Road Users, Inquiry into Motorcycle and Bicycle Safety*, Report No 5/54, December 2010, Recommendation 15, p. 52.

measures (such as high visibility clothing) might also work in combination to ensure maximum visibility of both motorcycle and rider.

- 6.84 The mandating of high visibility clothing and DRLs as part of the new Graduated Licensing Scheme in Victoria provides a timely opportunity for monitoring of the effectiveness of those measures by Transport for NSW. In addition, the Committee considers that it would be useful to obtain further information about the outcome of the measures taken in France to promote the visibility of riders, in particular the requirement to wear high visibility clothing which has been in operation since 2013.
- 6.85 The Committee considers that there has been significant progress in the development of safety features in the design and function of motorcycles. In particular, the Committee noted the progress made in relation to mandating ABS on motorcycles. The Committee is satisfied that the concerns in relation to the introduction of ABS, which have been raised throughout the inquiry, will be addressed as part of the consultations with motorcycle user groups after the RIS has been released.
- 6.86 The Committee suggests that Transport for NSW continues monitoring and investigating technological systems that can enhance safety for motorcycle riders and reduce fatality and trauma statistics.
- 6.87 The Committee proposes that Transport for NSW monitors the effectiveness of innovative driver assistance systems, which provide warnings for collision prevention and mitigation and evaluate the possible usefulness of such systems in NSW.

RECOMMENDATION 13

The Committee recommends that the State Insurance Regulatory Authority (SIRA) works with the insurance industry to examine insurance price signals, such as rebates on insurance, to increase the usage of protective clothing by motorcyclists and scooter riders.

RECOMMENDATION 14

The Committee recommends that Transport for NSW works with experts, the rider community and the other relevant organisations involved in expediting the development of a star rating system, similar to the ANCAP model for cars, for protective clothing for motorcyclists.

RECOMMENDATION 15

The Committee recommends that Transport for NSW works with experts to

- 1. expand the definition of an ‘approved motorbike helmet’ and ensure that those helmets can not only be legally used but also legally supplied in NSW, and**
- 2. ensure that the ‘approved motorbike helmet’ bear a compliance marking to make it readily identifiable and to enable enforcement of the correct helmets by the Police.**

RECOMMENDATION 16

The Committee recommends that as part of its next Three Year Action Plan, Transport for NSW examines the effectiveness of mandatory use of daylight headlights and high-visibility clothing in Victoria and France.

Chapter Seven – Licensing and training

- 7.1 This chapter examines motorcycle safety in New South Wales with particular reference to the inquiry’s fifth term of reference, which covers the subjects of licensing and training.
- 7.2 Licensing and training are addressed in the *NSW Motorcycle Safety Strategy 2012-2021* under the Strategy’s ‘Safe People’ objective. The strategies under this objective aim to reduce the number of motorcycle crash fatalities and the severity of injury by reducing distractions, improving awareness, training, education and regulatory measures.⁴¹⁶
- 7.3 As a safety initiative designed to meet the ‘Safe People’ objective, the Strategy proposes to continue research into motorcycle licensing and training. In the ‘First Three Years’ of the Strategy, five Actions are listed to pursue this safety initiative: 1) investigate ways to enhance the motorcycle mentoring program; 2) investigate the issue of returning riders; 3) disseminate the Motorcycle Handbook to relevant road users; 4) evaluate the NSW Graduated Licensing Scheme; and 5) contribute to National Road Safety Strategy, in particular by investigating licensing options to improve the safety of returning riders and reviewing licensing arrangements for motorcyclists.⁴¹⁷

LICENSING

Graduated Licensing Scheme (GLS)

- 7.4 The NSW Graduated Licensing Scheme (GLS) for motorcyclists was introduced in New South Wales on 1 June 2009. The scheme brought the licensing of motorcyclists into line with driver licensing, and was consistent with road safety policy and planning.⁴¹⁸ The chart on the right shows how a new rider progresses through the licensing scheme.⁴¹⁹
- 7.5 The GLS is based on a longstanding road safety concept, which aims to maximise the development of safe driving/riding skills among new riders/drivers by staging training and practice over a period of time. Under the GLS, riding privileges are gradually phased-in so that riders gain their early experience in lower risk situations. As they gain riding experience in more complex conditions, the restrictions on drivers/riders

Figure 5- How a New Rider Progresses Through the Licensing Scheme



⁴¹⁶ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 – 2021*, p. 16.

⁴¹⁷ Transport for NSW, *NSW Motorcycle Safety Strategy 2012 – 2021*, p. 18.

⁴¹⁸ Submission 17, Transport for NSW, p. 86.

⁴¹⁹ Submission 17, Transport for NSW, pp. 84 and 86.

are gradually lifted until eventually they achieve full licensure.⁴²⁰

- 7.6 A recent discussion paper on licensing for motorcyclists identified graduated licensing as consistent with best practice.⁴²¹ Furthermore, the NSW GLS is supported by a wide range of stakeholders that the Committee received evidence from. The National Motorcycle Alliance submitted that the current NSW scheme works well,⁴²² while the Institute of Public Works Engineering Australasia Limited (IPWEA) NSW Division noted strong support for the GLS scheme among governments and road safety practitioners.⁴²³
- 7.7 Transport for NSW advised that:
- On balance, the NSW GLS is commensurate with GLS best practice on the criterion of minimising crash risk as identified in the literature. NSW emphasises regulated training, graduated staging, a longer minimum threshold of riding experience and speeding restrictions.⁴²⁴
- 7.8 As mentioned above, the *NSW Motorcycle Safety Strategy 2012-2021* listed an evaluation of the GLS as an Action to be undertaken in the 'First Three Years' of the Strategy. However, in its submission to the inquiry, Transport for NSW does not present evidence that it had made any progress to undertake this evaluation.

Call for the review of the GLS

- 7.9 Throughout the inquiry, a number of submissions called for a review of the GLS, both as envisaged in the Strategy, and also in light of developments in other jurisdictions.⁴²⁵ Furthermore, witnesses appearing before the Committee at its public hearing on Monday 12 October 2015 agreed that the NSW GLS is a well-regarded scheme, but that developments in other jurisdictions highlighted where improvements might be considered.⁴²⁶
- 7.10 Mr Bernard Carlon, Acting Executive Director, Centre for Road Safety, Transport for NSW advised the Committee that Transport for NSW considered that the NSW scheme was the pre-eminent GLS program in Australia. With regard to the planned review of the GLS Mr Carlon said:
- ... we are committed to review in order to improve it and so we are recommending in the next strategy that we initiate an evaluation of that system and also move to improve it in whatever areas we can, in consultation both with the providers but all stakeholders as well.⁴²⁷

⁴²⁰ Submission 17, Transport for NSW, p. 86.

⁴²¹ Austroads, *A Discussion Paper on Elements of Graduated Licensing Systems for Motorcycle Rider*, Research Report AP-R469-14, Austroads, Sydney, NSW, 2014.

⁴²² Submission 10, National Motorcycle Alliance, p. 7.

⁴²³ Submission 14, Institute of Public Works Engineering Australasia Limited (IPWEA), NSW Division, p. 22.

⁴²⁴ Transport for NSW, Answers to supplementary questions, 3 November 2015, pp. 4-5.

⁴²⁵ Submission 15, Motorcycle Council of NSW Inc., p. 24.; Submission 14, Institute of Public Works Engineering Australasia Limited NSW Division, pp. 21-23.; Submission 12, NSW Chapter of the Australasian College of Road Safety, pp. 6-7.; Submission 10, National Motorcycle Alliance, p. 7.;

⁴²⁶ Mr Duncan McRae, Manager, Health Promotion and Advocacy, Youthsafe, NSW Chapter Committee member, Transcript of evidence, 12 October 2015, p. 17.

⁴²⁷ Mr Bernard Carlon, Acting Executive Director, Centre for Road Safety, Transport for NSW, Transcript of evidence, 12 October 2015, p. 9.

Developments in other jurisdictions

- 7.11 A number of submissions drew the Committee's attention to the developments in other jurisdictions. The Motorcycle Council of NSW Inc. argued that as Victoria and Queensland are currently reviewing their schemes, this is an opportunity for NSW to compare any revisions applied in those states against the NSW system.⁴²⁸
- 7.12 The NSW Chapter of the Australasian College of Road Safety reported that VicRoads is revising its motorcycle GLS, including the development of new mandatory on-road and off-road training based on a review of current best practice in rider training, licensing and adult learning, for introduction in early 2016. The College noted that VicRoads also plans to introduce an intermediary check on riding progress between a rider applying for the permit and licence.⁴²⁹
- 7.13 Mr Duncan McRae, appearing on behalf of the Australasian College of Road Safety at the public hearing, said that 'while the NSW scheme continued to be world leading, it has not kept up with best practice in education'. He cited European research, which showed the most effective training model to be a coaching model rather than an instructional model.⁴³⁰ Appearing later before the Committee and representing the Motorcycle Council of NSW Inc., Mr Guy Stanford endorsed Mr McRae's model for coaching over instruction. He described coaching schemes applied by his organisation and the favourable results they had achieved.⁴³¹
- 7.14 Mr Carlon advised that NSW was working closely with reviews of training schemes in other jurisdictions and that while the NSW scheme was the one being emulated, any improvements identified in interstate reviews would be evaluated for application in NSW.⁴³²
- 7.15 The results of one study, which Transport for NSW could consider in its review is the large scale evaluation of a motorcycle on-road coaching program, which was completed by the George Institute for Global Health. The study was published on behalf of VicRoads and provided to the Staysafe Committee and which found that on-road motorcycle coaching was not associated with reduced risk of crash.⁴³³

UNLICENSED RIDING

- 7.16 The issue of unlicensed riding has been also examined in the investigation of 'licensing' generally. As identified earlier in the report, a significant proportion – 17 per cent – of riders involved in fatal crashes was not authorised to ride.⁴³⁴

⁴²⁸ Submission 15, Motorcycle Council of NSW Inc., p. 24.

⁴²⁹ Submission 12, NSW Chapter of the Australasian College of Road Safety, p. 6.

⁴³⁰ Mr McRae, Evidence, 12 October 2015, p. 15.

⁴³¹ Mr Guy Stanford, Chair, Helmets Committee, Motorcycle Council of NSW Inc., Transcript of evidence, 12 October 2015, p. 41.

⁴³² Mr Carlon, Evidence, 12 October 2015, p. 7.

⁴³³ Ivers, R., Sakashita, C., Senserrick, T., Elkingtona, J., Loa, S., Boufous, S., de Rome, L., January 2016, *Does an on-road motorcycle coaching program reduce crashes in novice riders? A randomised control trial*, Accident Analysis and Prevention 86, pp. 40-46, viewed 28 October 2015, <<http://www.sciencedirect.com/science/article/pii/S000145751530097X>>.

⁴³⁴ Mr Carlon, Evidence, 12 October 2015, p. 12.

7.17 Dr Elizabeth de Rome, Senior Research Officer, representing the Australasian College of Road Safety, highlighted the need to focus on 'research into unlicensed riders'. She concurred with Assistant Commissioner Hartley that 'this is not an enforcement issue and it will not be solved by looking at it as an enforcement issue'. According to Dr de Rome, the solution to this issue is in the understanding of 'who they are and why they are riding unlicensed'.⁴³⁵

7.18 At its public hearing, the Committee investigated possible solutions to address the issue of unlicensed riders. One option was to look at amnesty for unlicensed riders. During the examination of witnesses, the Committee learned that unlicensed riders, who are involved in accidents and go to the hospital following a crash, are 'not recorded in any way'. In fact, Mr McRae advised that, in his opinion, 'if you recorded these events, people would avoid seeking care'. He explained:

If you had a situation where, if you fell off your bike it was immediately reported to the police—a couple of days later somebody would knock on your door and give you a ticket for unlicensed riding—you would not go to the hospital.⁴³⁶

7.19 In response to this evidence, the Members of the Committee then explored the option of an amnesty for unlicensed riders:

Should we not be trying to find a way—rather than hitting them with a stick giving them a carrot—to say, 'We know you have had a motorbike accident and we know you are unregistered. Can we help you? Can we educate you better rather than penalising you?'⁴³⁷

7.20 Dr de Rome strongly supports this idea. She stated:

That is a great idea. We do not know who they are. We are hoping to get funding for a cohort study in which I am involved that will follow 7,000 novice riders from when they first get their learners' permit until they go off their P-plates. We will see which ones pull out of the rider licensing process. They will have a car license, so we can keep tracking them. That is one thing we are hoping will happen. An amnesty is a great idea because we must bring them into the system. At the moment they have nothing to lose.⁴³⁸

7.21 The Institute of Public Works Engineering Australasia Limited (IPWEA), NSW Division also supports the idea of a moratorium on unregistered motorcycle users, with the view of helping reduce accidents and capture accurate data on accidents. Mr Michael Savage, appearing on behalf of IPWEA (NSW), stated:

Yes. Our answer is probably similar to what you have been given previously. Providing there is not a penalty but the moratorium is part of an education program and a data collection program, we would certainly support that.⁴³⁹

⁴³⁵ Dr Elizabeth de Rome, Senior Research Officer, Neuroscience Research Australia and NSW Chapter Committee member of the Australasian College of Road Safety, Transcript of evidence, 12 October 2015, p. 14.

⁴³⁶ Mr McRae, Evidence, 12 October 2015, p. 18.

⁴³⁷ Mr Adam Crouch MP, Transcript of evidence, 12 October 2015, p. 18.

⁴³⁸ Dr de Rome, Evidence, 12 October 2015, p. 19.

⁴³⁹ Mr Mick Savage, Manager, Roads and Transport Directorate, Institute of Public Works Engineering Australasia Limited (IPWEA) NSW Division, Transcript of evidence, 12 October 2015, p. 23.

TRAINING

The Motorcycle Rider Training Scheme

- 7.22 The Motorcycle Rider Training Scheme component of the GLS covers the key skills required for riding on the road and is delivered across two stages:
- (a) Completing and passing pre-learner training and a rider Driver Knowledge Test to obtain a Learner licence, and
 - (b) Completing pre-provisional training and passing a riding test to qualify for a P1 provisional licence.⁴⁴⁰
- 7.23 Requirements under the training scheme include that 1) an individual must be at least 16 years and nine months of age to be issued with a learner rider licence, and 2) novice riders are generally required to accumulate at least 36 months of provisional experience before graduating to a full rider licence.⁴⁴¹ Transport for NSW noted that this is an extra two years on a provisional licence relative to the scheme that existed prior to the introduction of the GLS. This also means that speed, alcohol, motorbike and demerit point restrictions will apply for an extra two years.⁴⁴²

Pre-learning training components

- 7.24 Inquiry participants acknowledged the robustness of the current GLS for motorcyclists but also took the opportunity to advocate for strengthening specific aspects of the scheme. One of those aspects is the pre-learner training component.
- 7.25 For instance, given the over-representation of novice riders in crashes, the IPWEA (NSW) endorsed the current compulsory elements in rider training, but called for an expansion of the pre-learning training component:
- A review of literature on young drivers has also led us to believe that Learner riders would benefit from additional hours of supervised training.⁴⁴³
- 7.26 IPWEA (NSW) stated that the current requirement for seven hours pre learning training is inadequate in comparison to learner driving requirements, comparing this with the recommendation made by the Royal Automobile Club of Victoria (RACV) that learner riders complete 25 hours of supervised on-road riding before graduating.⁴⁴⁴
- 7.27 Mr Duncan McRae, appearing for the Australasian College of Road Safety, noted that while NSW used a seven-hour learner scheme, Victoria is considering a two-day learner course.⁴⁴⁵
- 7.28 In its submission, Transport for NSW, acknowledged that youth and inexperience appear to be more significant risk factors for riders than for drivers. They argued

⁴⁴⁰ Transport for NSW, Answers to supplementary questions, 3 November 2015, pp. 4-5.

⁴⁴¹ Transport for NSW, Answers to supplementary questions, 3 November 2015, pp. 4-5.

⁴⁴² Transport for NSW, Answers to supplementary questions, 3 November 2015, pp. 4-5.

⁴⁴³ Submission 14, Institute of Public Works Engineering Australasia Limited (IPWEA), NSW Division, p. 22.

⁴⁴⁴ Submission 14, Institute of Public Works Engineering Australasia Limited (IPWEA), NSW Division, p. 22.

⁴⁴⁵ Mr McRae, Evidence, 12 October 2015, p. 17.

that graduated licensing is a key motorcycle safety initiative, which addresses this fact, and that the current NSW GLS is one of the strongest motorcycle licensing systems in the country.⁴⁴⁶

Post licence training

- 7.29 Another area of training, which was examined as part of the inquiry, is post licence training.
- 7.30 In its submission, Transport for NSW outlined the scope of refresher training courses available to experienced riders. They described the close alignment between the elements of the refresher courses available with training courses offered to learners, but acknowledged that while rider training was subsidised for learners, subsidies were not available for riders seeking to refresh and update their skills.⁴⁴⁷
- 7.31 The Motorcycle Council of NSW Inc. expressed concern that the take up of post-licence training is low, and argued that research is required to determine the factors behind this and identify initiatives which might improve take up rates.⁴⁴⁸
- 7.32 The Committee asked Mr Bernard Carlon, Transport for NSW, whether the Government has considered subsidies to encourage riders to undertake refresher courses and advanced levels of training. In reply, Mr Carlon acknowledged the several submissions that proposed subsidising refresher training, and advised that Transport for NSW was currently engaging with stakeholders on the question of how best to encourage post-licence training.⁴⁴⁹
- 7.33 In addition to subsidies, which he supported, Mr David Cooke, representing the National Motorcycle Alliance, proposed that the current motorcycle safety strategy could do more to engender a culture of continual skill development. He was not in favour of targeted marketing of post-licence training, however, he believes that skills improvement is important for all motorcyclists and should be promoted to the entire motorcycling community.⁴⁵⁰
- 7.34 Transport for NSW reported that forthcoming studies would examine the availability and content of post-license training courses and their relevance to riders, with the aim of identifying the most appropriate risk-based courses and how best to promote them to key target groups such as returning riders.⁴⁵¹
- 7.35 Stay Upright Rider Training cited the New Zealand *Ride Forever* program as an example of a program which could be studied for its application to address the issues of skills maintenance, refreshment and updating. The author described the New Zealand program as including both on-road and off-road components

⁴⁴⁶ Submission 17, Transport for NSW, p. 82.

⁴⁴⁷ Submission 17, Transport for NSW, p. 87.

⁴⁴⁸ Submission 15, Motorcycle Council of NSW Inc., p. 24.

⁴⁴⁹ Mr Carlon, Evidence, 12 October 2015, p. 12.

⁴⁵⁰ Mr David Cooke, General Manager, National Motorcycle Alliance, Transcript of evidence, 12 October 2015, p. 32.

⁴⁵¹ Submission 17, Transport for NSW, pp. 87-88.

directed at experienced and returning riders, and said that a government subsidy for the program had ensured a high take up rate.⁴⁵²

Returning and infrequent riders

7.36 In response to the issue of training for returning riders, Transport for NSW advised the Committee that no jurisdiction has developed a specific training program targeting infrequent riders. They noted, however, efforts by regulatory authorities in some other states to communicate with infrequent and mature-age riders through websites and printed information by addressing these riders' particular needs and concerns.⁴⁵³

7.37 In its submission, IPWEA (NSW) raised concerns about the needs of returning motorcycle riders in NSW, recommending that these riders complete a refresher or safe riding course to rebuild their skills.⁴⁵⁴

7.38 Stay Upright Rider Training, a national private training provider, expressed its particular interest in the needs of returning riders. While they provided a number of suitable courses for returning riders, covering both on-road and off-road training, take up for these courses was low. Stay Upright Rider Training argued that returning riders need encouragement to undertake training and proposed that such training be subsidised as was done for learner riders.⁴⁵⁵

7.39 Professor Raphael Grzebieta, Professor of Road Safety, Transport and Road Safety Research Centre (TARS), University of New South Wales, told the Committee at its public hearing, that 'it was important for anyone reinstating their licence or using a vehicle to undergo some form of retraining or relicensing'. Professor Grzebieta suggested that restrictions should be applied to motorcyclists before getting full control of a vehicle if they had not ridden for a long time.⁴⁵⁶

7.40 In response to a question inviting comment on plans to address the needs of returning riders, Mr Carlon, Transport for NSW, acknowledged that mature-age drivers may have a lot of experience, but not having been subject to the rigours of the GLS, in some aspects may not have the skills. He acknowledged the range of training programs in the marketplace for experienced riders, and advised that Transport for NSW had undertaken work to identify the competencies, which should be embedded in these programs. He said:

I think we need to work, again, closely with the industry to ensure that the sorts of competencies – the principles of defensive driving, the braking at various speeds and in various conditions, emergency braking, counter steering in curves and motorcycle safety inspection, hazard avoidance skills, overtaking and also road law understanding – all of those key competencies are really critical both at the entry level but also for more mature riders.⁴⁵⁷

⁴⁵² Submission 18, Stay Upright Rider Training, p. 3.

⁴⁵³ Submission 17, Transport for NSW, p. 82.

⁴⁵⁴ Submission 14, Institute of Public Works Engineering Australasia Limited (IPWEA), NSW Division, p. 23.

⁴⁵⁵ Submission 18, Stay Upright Rider Training, p. 4.

⁴⁵⁶ Professor Raphael Grzebieta, Professor of Road Safety, Transport and Road Safety Research Centre (TARS), University of New South Wales, Transcript of evidence, 12 October 2015, p. 49.

⁴⁵⁷ Mr Carlon, Evidence, 12 October 2015, p. 9.

7.41 Regarding post licence training for returning riders, the Committee was interested in identifying to what extent the price of NSW Compulsory Third Party Insurance (CTP) reflects the different group riders such as returning riders. In response to the Committee's question, the State Insurance Regulatory Authority advised that CTP insurers do not use a rider's history as a risk-rating factor:

CTP insurers in New South Wales determine their own risk-rating factors. Currently none of the CTP insurers use a rider's riding history as a risk-rating factor.

While an insurer may take into account any objective risk-rating factor (except race or postcode) when deciding whether to offer a rider a discount or to impose a loading, the Authority notes that there would be practical difficulties in determining whether a rider is a continuing or returning rider (i.e. riders may be aware that if they say that they have been consistently riding they will get a cheaper Green Slip premium). That said, the current range of risk factors used by insurers is regarded as reasonable proxy for a rider's potential risk of injuring other road users.⁴⁵⁸

Advanced rider training

7.42 While a couple of submissions mentioned the potential benefits of advanced rider training to address skills and safety⁴⁵⁹, it was an issue that the National Motorcycle Alliance advocated for.

7.43 The National Motorcycle Alliance argued that the rationale for its campaign is to use advanced rider training to improve rider skills as the single most effective way to reduce the motorcycle crash rate. Furthermore, it is a way for riders to take responsibility for their own safety rather than delegating this to other road users.⁴⁶⁰

7.44 At its public hearing in Sydney in Monday 12 October 2015, Mr David Cooke, General Manager, National Motorcycle Alliance, was asked by the Committee why his organisation supported advanced rider training so strongly. Mr Cooke emphasised the importance of training to teach road craft skills, which aimed to teach crash avoidance, and not merely crash mitigation. While he advised that the Alliance works closely with the Centre for Road Safety on engineering works to improve road safety, it was teaching people to avoid crashes which was most important.⁴⁶¹

7.45 The Committee was interested in any existing evidence, including statistics, which would indicated that advanced rider training leads to reduction in crashes. Mr Cooke advised that 'there is not a lot' of information⁴⁶² on the proposed correlation.

7.46 In evidence presented to the Committee at the public hearing, Mr McRae, appearing on behalf of the Australasian College of Road Safety, advised that he does not support advanced rider training:

⁴⁵⁸ State Insurance Regulatory Authority, Answers to Supplementary Questions, 20 October 2015, p. 1.

⁴⁵⁹ Submission 13, National Motorists Association of Australia, p. 6.

⁴⁶⁰ Submission 10, National Motorcycle Alliance, p. 8.

⁴⁶¹ Mr Cooke, Evidence, 12 October 2015, p. 31.

⁴⁶² Ms. Eleni Petinos MP and Mr. Cooke, Evidence, 12 October 2015, p. 33.

Having owned and managed a rider training company that delivered advanced rider training, I do not support it as a widespread strategy. I think on-road training is a much more effective thing.⁴⁶³

GOVERNANCE OF RIDER TRAINING

Training syllabus and training resources for motorcyclists

7.47 The issue of the syllabus for motorcyclists being outdated was one of the recurrent themes of the inquiry. For example, in its submission, the NSW Chapter of the Australasian College of Road Safety argued that the NSW rider training and assessment curricula are dated and in need of a full review. To illustrate this view, the College provided a range of recent developments, which should be considered for inclusion in the curriculum including new education techniques, trends in motorcycle crash patterns, and new technologies such as ABS brakes and traction control.⁴⁶⁴

7.48 The need to update the training syllabus was also raised by the author of a partially confidential submission, who stated that 'it has been at least seven years since the training syllabus was updated'. The submission also stressed the need to involve contractors in the revision of training syllabus for motorcyclists:⁴⁶⁵

The contractors are not given any feedback on current trends relative to motorcycle road trauma and are not encouraged or invited to become involved in aspects of the training syllabus to address perceived deficiencies in the curriculum. This is a sad waste of resources affecting those that are, in many circumstances, most eminently qualified to make suggestions for improvement.⁴⁶⁶

7.49 Another issue that was raised in this context is the issue of out-dated training resources. In particular, the author of a partially confidential submission stated that the training manuals, as well as the audio/visual presentations, which are delivered in classroom training, need to be updated.⁴⁶⁷

7.50 Appearing for NSW Roads and Maritime Services (RMS), Mr Mike Cush, Network General Manager, agreed that the syllabus had not been updated for several years and advised the Committee that updating the syllabus and training resources was under consideration.⁴⁶⁸

7.51 RMS advised the Committee that 'it will update the training syllabus and training manuals for the rider training scheme', which 'should take place in 2016', and that it will involve all rider training contractors as part of this work.⁴⁶⁹

⁴⁶³ Mr McRae, Evidence, 12 October 2015, pp. 17-18.

⁴⁶⁴ Submission 12, NSW Chapter of the Australasian College of Road Safety, p. 6.

⁴⁶⁵ Submission 16, name suppressed, p. 4.

⁴⁶⁶ Submission 16, name suppressed, p. 4.

⁴⁶⁷ Submission 16, name suppressed, p. 4.

⁴⁶⁸ Mr Mike Cush, Network General Manager, Roads and Maritime Services, Transcript of evidence, 12 October 2015, p. 7.

⁴⁶⁹ RMS in Transport for NSW, Answers to Supplementary Questions and Questions Taken on Notice, 3 November 2015, p. 3.

Support for trainers

- 7.52 Inadequate support provided to rider training contractors was a recurring topic throughout the inquiry.
- 7.53 The NSW Chapter of the Australasian College of Road Safety raised concerns in its submission about reduced resources dedicated to rider training. The College noted that when the mandatory rider training scheme commenced in 1990, the then Roads and Traffic Authority maintained a dedicated Rider Training Unit as well as specially trained support staff in the call centre, regular compliance audits and ongoing professional development of motorcycle riding instructors. The College submitted that these services have all but disappeared and despite the success of the NSW scheme, in order to maintain standards, professional development, quality assurance and regular compliance audits are required.⁴⁷⁰
- 7.54 A partially confidential submission received by the Committee gave detailed information about the support provided by the Rider Trainer Unit to private training providers, and how this has declined in recent years. The author stated that this decline in support:
- ‘is seriously affecting our ability to continue to deliver a quality service to the public and to operate efficiently and effectively within the parameters of our contract’.⁴⁷¹
- 7.55 The author noted that during this time of diminishing support and oversight by the RMS, the number of riders being trained had more than doubled.⁴⁷²
- 7.56 The Motorcycle Council of NSW Inc. also argued for the retention of the Rider Training Unit in order to maintain compliance of service providers and professional development of rider trainers.⁴⁷³
- 7.57 The Committee pursued the issue of support for trainers when it took evidence at its public hearing in Sydney in Monday 12 October 2015. Mr Duncan McRae, appearing on behalf of the Australasian College of Road Safety, said his studies suggested that the lack of professional development and support for instructors led to the decline in the standards and a lack of road craft in instructors:
- If instructors are unable to deliver and explain and demonstrate best practice, what hope do we have of the people who are undertaking courses to learn that?⁴⁷⁴
- 7.58 While Mr McRae said some quality assurance resources still exist, they have been reduced.⁴⁷⁵
- 7.59 In its response to the questions asked by the Committee, RMS advised:
- RMS continues to support the rider training scheme through internal business units, which provide support for invoice payment and general inquiries including by students, correspondence, refunds and no fee re-booking.⁴⁷⁶

⁴⁷⁰ Submission 12, NSW Chapter of the Australasian College of Road Safety, p. 6.

⁴⁷¹ Submission 16, name suppressed, p. 1.

⁴⁷² Submission 16, name suppressed, p. 4.

⁴⁷³ Submission 15, Motorcycle Council of NSW Inc., p. 24.

⁴⁷⁴ Mr McRae, Evidence, 12 October 2015, p. 15.

⁴⁷⁵ Mr McRae, Evidence, 12 October 2015, p. 15.

Barriers to training

- 7.60 Cost of training was also examined in the inquiry. For instance, in its submission, the NSW Chapter of the Australasian College of Road Safety expressed support for the NSW Government's subsidy system, which had reduced the cost to new riders in a mandatory training environment. The College submitted that the subsidy, combined with the rider training tender system, has been effective when compared with other Australian jurisdictions where new riders pay two to three times as much for similar training. In the College's view, higher training costs could adversely impact the rates of unlicensed riding.⁴⁷⁷
- 7.61 The National Motorcycle Alliance identified cost as one of the main barriers to undertaking training and recommended a government subsidy for riders to attend intermediate and advanced training.⁴⁷⁸
- 7.62 In addition to cost, the National Motorcycle Alliance identified availability of training as a barrier, and recommended that the government provide financial assistance for training schools to take their courses to regional areas, and for the construction of suitable training facilities in country New South Wales.⁴⁷⁹
- 7.63 IPWEA (NSW) also identified lack of access to training courses in regional areas as an issue for learner riders, calling for the GLS conditions to be applied to all new riders regardless of where they live.⁴⁸⁰
- 7.64 During the public hearing, the Committee examined the issues of supply of training courses in the rural areas of New South Wales and the role the Government could play in ensuring adequate supply of training to riders in regional and rural areas of NSW.⁴⁸¹ The Committee was particularly interested in this issue given the context where an increase of 22 per cent of injury numbers in the country rural areas, as discussed at the beginning of the report, has been registered for the period from 2013 to 2014.⁴⁸²
- 7.65 Mr Bernard Carlon, Transport for NSW, stated that the lack of supply may be due to lack of demand and that it is 'the function of the market that if the training courses are available, they are available in places where there is sufficient demand for them'.⁴⁸³ Mr Carlon conceded that there is a role for RMS to ensure the availability of training courses in regional areas'.⁴⁸⁴

⁴⁷⁶ RMS in Transport for NSW, Answers to Supplementary Questions and Questions Taken on Notice, 3 November 2015, p. 3.

⁴⁷⁷ Submission 12, NSW Chapter of the Australasian College of Road Safety, p. 6.

⁴⁷⁸ Submission 10, National Motorcycle Alliance, p. 12.

⁴⁷⁹ Submission 10, National Motorcycle Alliance, p. 13.

⁴⁸⁰ Submission 14, Institute of Public Works Engineering Australasia Limited (IPWEA), NSW Division, p. 22.

⁴⁸¹ Dr Mehreen Faruqui MLC and Mr Carlon, Evidence, 12 October 2015, p. 8.

⁴⁸² Mr Greg Aplin MP, Chair of the Staysafe Committee, Transcript of evidence, 12 October 2015, p. 4.

⁴⁸³ Mr Carlon, Evidence, 12 October 2015, p. 9.

⁴⁸⁴ Dr Mehreen Faruqui MLC and Mr Carlon, Evidence, 12 October 2015, p. 9.

Conclusions

- 7.66 The Committee noted the evidence suggesting that the GLS for riders in New South Wales is one of the strongest motorcycle licencing systems in Australia. The Committee also took note of the current GLS reviews in other jurisdictions. Without diminishing the fact that NSW has a strong GLS for riders, the Committee considers that, in light of developments in other jurisdictions as well as the commitment by Transport for NSW to undertake a review, a review of the GLS for riders should occur within the next three years of the Strategy.
- 7.67 The Committee received a considerable amount of information on unlicensed riding and is therefore convinced that tackling this issue should be a high priority. The Committee noted that the profile of unlicensed riders has not been established and that understanding 'who they are and why they are unlicensed' is a key to finding a solution to this issue. To that end, the Committee considers that an amnesty for unlicensed riders is an option, which could be explored as a mechanism for gathering evidence on the profile of unlicensed riders and subsequently integrating them into the licensing system.
- 7.68 As novice riders present a significant risk factor in crashes, the Committee is convinced that there is merit in increasing the hours of supervised training.
- 7.69 The Committee sees merit in promoting the importance of continual skill improvement to all riders and believes that Transport for NSW is addressing this through its educational campaigns. The Committee notes that Transport for NSW is currently engaging with stakeholders on the question of how best to encourage post-licence training. The Committee took note of the call for subsidies, but would be interested to see other methods of encouraging the uptake of post-licence training, such as the motorcycle mentoring program and involvement of the industry, being explored as options first.
- 7.70 The Committee agrees with inquiry participants that returning and infrequent riders would need to participate in a refresher course as part of post licencing training. The Committee notes that a number of refresher courses are available, but that there is no refresher course tailored for infrequent/returning riders. Given the risk factor that infrequent/returning riders pose, the Committee believes that investing in the development of a returning rider training course is warranted.
- 7.71 The Committee agrees that there would be practical difficulties in determining whether a rider is a 'continuing or returning rider' and therefore difficult to use 'rider's riding history' as a risk factor in determining the CTP price. However, the Committee considers that there is merit in considering rebates on CTP for mature aged riders who undertake a refresher course.
- 7.72 The Committee is pleased that RMS will update the training syllabus and training manuals for the rider training scheme in 2016, and that it will involve all rider training contractors as part of this work. The Committee would welcome this to be recorded as an Action in the next Three Year Action Plan.
- 7.73 The Committee notes that RMS continues to support the rider training scheme through internal business units. The Committee notes that there is no dedicated,

specialised unit, which offers support, guidance and management of the rider training scheme. The Committee is concerned about the impact this will continue to have on the instructors' ability to provide best practice and consistent riding instructions across the State. The Committee is convinced by evidence provided that a dedicated role/unit needs to be in place to support riding instructors across NSW.

7.74 The Committee also examined the proposition to invest in advanced rider training. Based on the evidence received, the Committee is not convinced that there is sufficient evidence on the positive correlation between advanced rider training and reduction in motorcycle crashes. Therefore, the Committee does not consider that there is sufficient merit in pursuing this proposition at this stage.

7.75 The Committee is concerned about evidence suggesting that there may be no adequate supply of rider training courses in rural and regional areas. The Committee urges RMS to address this issue to ensure that training is available to riders across the State.

RECOMMENDATION 17

The Committee recommends that Transport for NSW and Roads and Maritime Services review the NSW Graduated Licensing Scheme for motorcyclists to take account of recent developments in other jurisdictions.

RECOMMENDATION 18

The Committee recommends that Transport for NSW addresses the issue of unlicensed riding in NSW by

- 1. Establishing a profile of unlicensed riders, possibly via amnesty of unlicensed riders; and**
- 2. Devising a strategy, based on that profile, to bring the unlicensed riders into the licensing system and to curb the occurrence of unlicensed riding.**

RECOMMENDATION 19

The Committee recommends that Transport for NSW and Roads and Maritime Services work with training providers, riders and motorcycle groups in developing and promoting a returning riders training course to ensure that all riders have most up-to-date knowledge and competencies required for riding in NSW.

RECOMMENDATION 20

The Committee recommends that the State Insurance Regulatory Authority works with the insurance industry in developing a policy that would provide rebates on the NSW Compulsory Third Party insurance for mature aged riders who undertake a refresher post licensing course.

RECOMMENDATION 21

The Committee recommends that Roads and Maritime Services introduces an adequate support system for riding instructors, trainers and contractors; and conducts regular compliance audits of and provides on-going professional development to motorcycle riding instructors.

RECOMMENDATION 22

The Committee recommends that Road and Maritime Services works with training providers to ensure adequate availability and accessibility of rider training courses in metropolitan, regional and rural NSW.

Appendix One – List of Submissions

1	Mr Carlos Stotz
2	Mr Mark and Donna Lee
3	Mr Kenneth Levien
4	Shooters and Fishers Party NSW Motorcycle Branch
5	Mr Ben O’Leary
6	Ms Fiona Field
7	Mr Peter Lenaghan
8	Federal Chamber of Automotive Industries
9	NRMA Motoring and Services
10	National Motorcycle Alliance / Motorcycling NSW
11	The Survive the Ride Association of NSW (STRA NSW)
12	NSW Chapter of the Australasian College of Road Safety
13	National Motorists Association of Australia
14	Institute of Public Works Engineering Australasia Limited (IPWEA) NSW Division
15	Motorcycle Council of NSW Inc.
16	Name Suppressed
17	Transport for NSW
18	Stay Upright Rider Training
19	Safety and Policy Analysis International
20	Mr Lazare Sachs
21	Pedestrian Council of NSW
22	Transport and Road Safety Research Centre (TARS), University of New South Wales

Appendix Two – List of Witnesses

12 October 2015, Jubilee Room, Parliament House

Witness	Organisation
Mr Bernard Carlon Acting Executive Director Centre for Road Safety	Transport for NSW
Mr Melvin Eveleigh Manager, Safer Roads Centre for Road Safety	
Assistant Commissioner John Hartley Traffic & Highway Patrol Command	NSW Police
Mr Mike Cush Network General Manager, NSW	Roads and Maritime Services
Mr Andrew Nicholls Executive Director Motor Accidents Insurance Regulation	State Insurance Regulatory Authority
Dr Elizabeth de Rome NSW Chapter Committee Member	Australasian College of Road Safety
Mr Duncan McRae NSW Chapter Committee Member	
Mr Mick Savage Roads & Transport Directorate Manager	Institute of Public Works Engineering Australasia Limited (IPWEA) NSW Division
Mr David Briant Research and Policy Officer	
Mr Jack Haley Senior Policy Adviser	NRMA Motoring and Services
Mr David Cooke General Manager	National Motorcycle Alliance
Mr Christopher Burns Vice-Chairman	
Mr Brian Wood Secretary	Motorcycle Council of NSW Inc.
Mr Guy Stanford Chair, Helmets Committee	
Prof. Raphael Grzebieta	Transport and Road Safety Research

JOINT STANDING COMMITTEE ON ROAD SAFETY
LIST OF WITNESSES

Professor (Road Safety)

Centre (TARS)

Prof. Ann Williamson
Director, TARS Research Centre
& Professor (Human Factors)

University of New South Wales

Appendix Three – Extracts from Minutes

MINUTES OF MEETING NO. 2

1.16pm, Wednesday 12 August 2015
Room 1254, Parliament House

Members Present: Mr Greg Aplin MP (Chair), Mr Adam Crouch MP, Dr Mehreen Faruqi MLC, Ms Eleni Petinos MP, Mr Scot MacDonald MLC (Deputy Chair), Mr Daniel Mookhey MLC.

Officers in Attendance: Bjarne Nordin, Vedrana Trisic, Sasha Shevtsova, Jennifer Gallagher, Natalia Krslovic

1. **Apologies:** Mr Nick Lalich MP, Mr Adam Marshall MP
2. **Confirmation of minutes:** Resolved on the motion of Mr MacDonald that the minutes of the Meeting no.1, conducted on 3 June 2015, be confirmed.
3. **Referral from the Minister for Roads, Maritime and Freight for an Inquiry into Motorcycle Safety in NSW**

3.1 Consideration of the terms of reference for the Inquiry into Motorcycle Safety

Resolved on the motion of Mr MacDonald that the Committee adopt the terms of reference for the Inquiry into Motorcycle Safety in NSW, and that the Committee insert (*and driver*) between the words *rider* and *behaviour* in term of reference (b).

3.2 Call for submissions

Resolved on the motion of Mr Crouch:

- That the Committee call for submissions and advertise the inquiry on the Committee's website by cob 12 August 2015.
- That the closing date for submissions be 9 September 2015.
- That the Chair issue a press release promoting the inquiry.
- That the secretariat advertises the inquiry in a relevant motorcycle trade publication.

3.3 Proposed list of stakeholders to be invited to make submissions

Resolved on the motion of Mr MacDonald that the Committee adopt the list of stakeholders, that they be informed of the inquiry and be invited to make a submission.

3.4 Draft project implementation plan for the inquiry

Resolved on the motion of Dr Faruqi that the Committee note the draft project implementation plan for the inquiry.

MINUTES OF MEETING NO. 3

12.14pm, Friday 18 September 2015
Joint Operations Centre (JOC) Rooms 1 and 2
Level 1 Transport Management Centre
25 Garden Street, Eveleigh NSW 2015

Members Present: Mr Greg Aplin MP (Chair), Mr Scot MacDonald MLC (Deputy Chair), Mr Adam Crouch MP, Mr Nick Lalich MP

Officers in Attendance: Jason Arditi, Vedrana Trisic, Jennifer Gallagher, Natalia Krslovic

1. **Apologies:** Mr Adam Marshall MP, Dr Mehreen Faruqi MLC, Ms Eleni Petinos MP, Mr Daniel Mookhey MLC.
2. **Confirmation of minutes:** Resolved, on the motion of Mr MacDonald seconded by Mr Crouch, that the minutes of Meeting No. 2, conducted on 12 August 2015, be confirmed.

3. Inquiry into Motorcycle Safety in NSW

3.1 Resolved, on the motion of Mr McDonald seconded by Mr Crouch

- That Committee receive and authorise the publication-in-full (with signatures and direct contact details redacted) of the submissions numbered 1-15, 18-20.
- That the Committee receive and authorise the partial publication (with the name and other identifying information suppressed) of submission 16.
- That in preparing submissions for publication, material in any published submission be redacted which identifies or tends to identify any third party either by name; address; business name, type or location; includes any photographs; defames or potentially defames any individual third party through a description of their business or activity; or may expose any submission maker to unwanted attention.

3.2 Confirmation of a date for the public hearing

Resolved, on the motion by Mr Lalich seconded by Mr Crouch, that the Committee conduct a public hearing on 12 October 2015.

3.3 Adoption of the list of witnesses to be invited for hearings.

Resolved, on the motion by Mr Crouch seconded by Mr McDonald, that the Committee invite the following witnesses for a public hearing:

1. NSW Chapter of the Australasian College of Road Safety
2. Institute of Public Works Engineering Australasia Limited NSW Division
3. National Motorcycle Alliance/Motorcycling NSW
4. Motorcycle Council of NSW Inc.
5. NRMA
6. Transport and Road Safety Research Centre (TARS)
7. Transport for NSW
8. Motor Accidents Authority

3.4 Background brief on the NSW Motorcycle Safety Strategy and action plan

Resolved, on the motion by Mr Lalich, that the Committee note the contents of the brief.

3.5 The Committee noted that the Chair wrote to the Minister for Roads, dated and sent 13 August 2015, advising him of the Committee's resolution in relation to the Terms of Reference for the inquiry.

5. Media coverage of the launch of inquiry and advertisement in a motorcycle trade magazine.

The Committee Members noted the media coverage and trade magazine advertisement for the inquiry.

MINUTES OF MEETING NO. 4

9.34 am, Monday 12 October 2015

Jubilee Room, Parliament House

Members Present: Mr Greg Aplin MP (Chair), Mr Adam Crouch MP, Mr Nick Lalich MP, Dr Mehreen Faruqi MLC.

Officers in Attendance: Bjarne Nordin, Vedrana Trisic, Jacqueline Isles, Jennifer Gallagher

1. Apologies: Mr Scot MacDonald MLC (Deputy Chair), Mr Adam Marshall MP, Mr Daniel Mookhey MLC, Ms Eleni Petinos MP.

2. Confirmation of minutes: Resolved, on the motion of Mr Crouch, that the minutes of Meeting No. 3, conducted on 18 September 2015, be confirmed.

3. Inquiry into Motorcycle Safety in NSW

3.1 Consideration of late submissions

Resolved, on the motion of Mr Lalich

- That the Committee receive and authorise the publication-in-full (with signatures and direct contact details redacted) of the submissions numbered 17, 21 and 22.
- That in preparing submissions for publication, material in any published submission be redacted which identifies or tends to identify any third party either by name; address; business name, type or location; includes any photographs; defames or potentially defames any individual third party through a description of their business or activity; or may expose any submission maker to unwanted attention.

3.2 Correspondence to the Committee and responses

Members noted the following correspondence to the Committee and the relevant response:

- Letter from Mr. Peter Wright, Road Safety Officer, City Of Sydney explaining why the City Of Sydney has not made a formal submission to Inquiry into Motorcycle Safety in NSW but providing road safety observations in the local government area, dated 18 September 2015 and response to Mr. Peter Wright, sent on 6 October 2015.

3.3 Public hearing on the Inquiry into Motorcycle Safety (12 October 2015)

Resolved, on the motion by Mr Lalich, that the Committee authorises the audio-visual recording, photography and broadcasting of the public hearing on 12 October 2015 in accordance with the NSW Legislative Assembly's guidelines for coverage of proceedings for parliamentary committees administered by the Legislative Assembly.

Resolved, on the motion by Mr Crouch, that the corrected transcript of evidence given on 12 October 2015 be authorised for publication and uploaded on the Committee's website.

JOINT STANDING COMMITTEE ON ROAD SAFETY
EXTRACTS FROM MINUTES

Resolved, on the motion of Dr Faruqi, that the witnesses be given three business days to respond to any questions taken on notice during the public hearing.

Resolved, on the motion by Mr Crouch that the witnesses be requested to return answers to additional questions within 5 business days of the date on which the questions are forwarded to the witness, and that once received, answers be published on the Committee's website.

The Committee adjourned at 9.40am.

At 10.00am, the Chair declared the public hearing open and witnesses and the public were admitted.

Transport for NSW: Mr Bernard Carlon, Acting Executive Director, Centre for Road Safety was sworn and examined. Mr Melvin Eveleigh, Manager, Safer Roads, Centre for Road Safety was sworn and examined.

NSW Police: Assistant Commissioner John Hartley APM, Commander Traffic and Highway Patrol Command was sworn and examined.

Roads and Maritime Services (RMS): Mr Mike Cush, Network General Manager, NSW was sworn and examined.

State Insurance Regulatory Authority: Mr Andrew Nicholls, Executive Director, Motor Accidents Insurance Regulation was sworn and examined.

NSW Chapter of the Australasian College of Road Safety: Dr Liz de Rome, Committee Member was affirmed and examined. Mr Duncan McRae, Committee Member was sworn and examined.

Institute of Public Works Engineering Australia Limited NSW Division (IPWEA): Mr Mick Savage, Manager, Roads and Transport Directorate was sworn and examined. Mr David Briant, Research and Policy Officer was sworn and examined.

NRMA: Mr Jack Haley, Senior Policy Advisor was affirmed and examined.

National Motorcycle Alliance: Mr David Cooke, General Manager was affirmed and examined.

Motorcycle Council of NSW: Mr Christopher Burns, Vice - Chairman was affirmed and examined. Mr Brian Wood, Secretary was affirmed and examined. Mr Guy Stanford, Chair, Helmets Committee was affirmed and examined.

Transport and Road Safety (TARS) Research Centre, University of NSW: Professor Raphael Grzebieta, Professor (Road Safety) was affirmed and examined. Professor Anne Williamson, Director and Professor (Human Factors) was affirmed and examined.

Evidence concluded, the witnesses and public withdrew.

MINUTES OF MEETING NO. 5

1 pm, Wednesday 18 November 2015
Waratah Room, Parliament House

Members Present: Mr Greg Aplin MP (Chair), Mr Scot MacDonald MLC, Mr Adam Crouch MP, Mr Nick Lalich MP, Dr Mehreen Faruqi MLC, Ms Eleni Petinos MP, and The Hon. Daniel Mookhey

Officers in Attendance: Jason Arditi, Vedrana Trisic, Jacqueline Isles, Jennifer Gallagher

1. Apologies: Mr Adam Marshall MP

2. Confirmation of minutes: Resolved, on the motion of Mr Lalich that the minutes of Meeting No.4, conducted on 12 October 2015, be confirmed.

3. Inquiry into Motorcycle Safety in NSW

3.1 Correspondence: The Committee noted the letter from Mr John Roydhouse, CEO of IPWEA re Appreciation for Opportunity to Appear at Staysafe Inquiry into Motorcycle Safety, dated 14 October 2015.

3.2 Consideration of the Chair's Draft Report

Resolved, on the motion of Dr Faruqi, seconded by Mr Lalich that the Committee considers the Chair's draft report chapter by chapter.

The Committee proceeded to consider the Chair's draft report chapter by chapter.

Resolved, on the motion of Mr Crouch that Chapter One be adopted. Motion agreed to.

Chapter two proposed.

Resolved, on the motion of Mr Crouch seconded by Mr Lalich, that Chapter Two be adopted. Motion agreed to.

Chapter Three proposed.

Dr Faruqi moved that Recommendation 2 be amended by adding the words 'alcohol and' after the words 'the role of' and before the words 'drugs in motorcycle crashes'.

Discussion ensued. Question put and passed.

Resolved, on the motion of Mr Lalich that Chapter Three, as amended, be adopted. Motion agreed to.

Chapter Four proposed.

Dr Faruqi moved that Recommendation 5 be amended by adding the words 'in consultation with Local Government NSW' after 'Roads and Maritime Services and before 'create and implement'.

Discussion ensued. Question put and passed.

Resolved on the motion of Mr Crouch that Chapter Four, as amended, be adopted. Motion agreed to.

JOINT STANDING COMMITTEE ON ROAD SAFETY
EXTRACTS FROM MINUTES

Chapter Five proposed.

Dr Faruqi moved that the following words be added into Recommendation 10 and set out as point 2 of the recommendation: 'Ensuring that driver knowledge tests for learner and provisional drivers incorporate questions on vulnerable road users including motorcyclists'.

The Chair referred to para 5.51 of the report which states that Transport for NSW informed the Committee that the Driver Knowledge Test does include a specific question for drivers.

Discussion ensued. Question put and negatived.

Mr MacDonald moved that the words 'which would then be provided to the driver, who causes collision and/or injury to a motorcyclist' be removed from paragraph 5.91.

Discussion ensued. Question put and passed.

Mr MacDonald moved that the following words, constituting item 3 of Recommendation 10, be removed: 'Implementing 'injured party impact statements', which would increase drivers' awareness of the impact of inattentive driving on motorcyclists.'

Discussion ensued. Question put and passed.

Resolved, on the motion of Mr MacDonald that Chapter Five, as amended, be adopted. Motion agreed to.

Chapter Six proposed.

Resolved, on the motion of Mr Mookhey that Chapter Six be adopted. Motion agreed to.

Chapter Seven proposed.

Dr Faruqi moved that the words 'and RMS' be inserted in Recommendation 19 after 'Transport for NSW' and that the word 'works' be changed to 'work'.

Discussion ensued. Question put and passed.

Dr Faruqi moved that a new point be added to Recommendation 21 by inserting the words 'Employs dedicated staff to work with riding instructors, trainers and contractors to provide adequate support and oversight' after the words 'and contractors', followed by the words 'conducts regular compliance audits'.

Discussion ensued. Question put and negatived.

Mr MacDonald moved that the words 'and accessibility' be inserted in Recommendation 22 after the word 'availability'.

Discussion ensued. Question put and passed.

Dr Faruqi moved, seconded by Mr Crouch, that the words 'in rural and regional areas' be replaced by 'in metropolitan, regional and rural NSW' after the words 'rider training courses'.

Discussion ensued. Question put and passed.

Resolved, on the motion of Mr MacDonald that, Chapter Seven, as amended, be adopted.
Motion agreed to.

Resolved, on the motion of Mr Crouch, seconded by Mr Lulich:

- That the Committee adopts the draft report, as amended and signed by the Chair for presentation to the House, and authorises the Secretariat to make appropriate final editing and stylistic changes as required.
- That, once tabled, the report be published on the Committee's webpage.
- That the Chair issues a press release announcing the tabling of the Committee's report, for dissemination by the Committee Secretariat.

Motion agreed to.

4. General Business

The Chair thanked Members and Committee staff for their work. The Members expressed their appreciation of staff efficiency and hard work.

5. Next Meeting

The Committee adjourned at 1.45 pm until the first Wednesday of the next sitting period in 2016.