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Parliament of Tasmania

LEGISLATIVE COUNCIL SELECT COMMITTEE

ROAD SAFETY

FINAL REPORT
Volume 1

Members

Hon Ivan Dean MLC
Hon Ruth Forrest MLC
Hon Paul Harriss MLC
Hon Don Wing MLC (Chair)

Secretary: Mr Nathan Fewkes

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GLOSSARY OF TERMS

ADRs	Australian Design Rules
ADTA	Australian Driver Training Association
AIAM	Australian Institute of Advanced Motorists
AMA	Australian Medical Association
ANCAP	Australian New Car Assessment Program
ANPR	Automatic Number Plate Recognition
ARRB	Australian Road Research Board (ARRB Group)
ATDC	Alcohol Tobacco and Other Drugs Council
ATSB	Australian Transport Safety Bureau
ATV	All-terrain vehicle
AusRAP	Australian Road Assessment Program
BAC	Blood Alcohol Concentration (or Content)
CASR	Centre for Automotive Safety Research
CDM	Crash Data Manager
COAG	Council of Australian Governments
CTP	Compulsory third-party
DEPHA	Department of Environment, Parks, Heritage and the Arts
DIER	Department of Infrastructure, Energy and Resources
DPEM	Department of Police and Emergency Management
DRLs	Daytime Running Lights
DSE	Department of Sustainability and Environment (Vic)
ESC	Electronic Stability Control
GDLS	Graduated Driver Licensing Scheme
ILs	Investigatory Levels
MAIB	Motor Accidents Insurance Board
MUARC	Monash University Accident Research Centre
OECD	Organisation for Economic Cooperation and Development
OFTs	Oral Fluid Tests
PAT	Police Association of Tasmania
RACT	Royal Automobile Club of Tasmania
RBTs	Random Breath Tests
RAR	Road Accident Rescue
RSAC	Road Safety Advisory Council
RCIS	Research Centre for Injury Studies
RQI	Riding Quality Indicator
RSTF	Road Safety Task Force
RTA	Roads and Traffic Authority (NSW)
RYDA	Rotary Youth Driver Awareness
SCIN	Speed Camera Infringement Notice
SDD	Speed detection devices
SES	State Emergency Service
TAC	Transport Accident Commission
TAS	Tasmanian Ambulance Service
TFS	Tasmanian Fire Service
TINs	Traffic Infringement Notices
TMC	Traffic Management Centre
TRARA	Tasmanian Road Accident Rescue Arrangements
TRSC	Tasmanian Road Safety Council
UTAS	University of Tasmania
VSL	Variable Speed Limit

EXECUTIVE SUMMARY

This Final Report follows the Committee's Interim Report which was presented in December 2009. The two Reports should be read and considered in conjunction with each other, as there is an overlapping of several important issues.

The evidence received establishes that the main factors contributing to crashes are inexperience, inattention, alcohol and excessive speed. There has been no abatement in the frequency of these factors contributing to crashes in Tasmania in the last ten years.

The number of fatalities in 2009 was tragically high, although there has been an overall reduction in the number of serious casualties in Tasmania since 2000. Notwithstanding this, since 2005 Tasmania has been above the national average in terms of road crash deaths per 100,000 population, per 10,000 registered vehicles and per 100 million vehicle-kilometres travelled.

One of the strongest and most consistent themes throughout the evidence and submissions received by the Committee was the compelling need for compulsory driver education to be undertaken by all learner drivers. There is an abundance of evidence that this would be beneficial. The Committee is at a loss to understand the intransigent attitude of the Department of Energy, Infrastructure and Resources in rejecting the adoption of this measure.

Evidence was received that the current licence testing process does not adequately identify a candidate's driving competency and skill and that most learner drivers are merely taught how to pass the test.

Provisional and novice drivers, especially in the 17 to 25 age group, are at higher risk of serious injury and death than other road users. Unquestionably, the introduction of compulsory education for learner drivers will significantly reduce the risk of injuries and deaths in this age group. The clear weight of evidence provided to the Committee and the experience in the Australian Capital Territory, where such driver education courses are compulsory, provide compelling support for this proposition. It is an issue that should no longer be ignored.

Whilst the weight of evidence was in favour of retaining the 0.05 BAC level, the Committee is of the opinion that heavier penalties should be imposed upon repeat drink-driving offenders. The Courts should be empowered, in appropriate cases, to order that alcohol interlock devices be fitted on the vehicles of repeat offenders as a condition of them being re-licensed. Third and subsequent repeat drink-driving offenders should be required to undergo mandatory treatment for their alcohol abuse.

Driving without a licence or during the period of suspension should be treated as serious offences and punished accordingly.

Although breath-testing at high visibility sites at random locations is effective, the Committee agrees with the Police Association of Tasmania that targeted testing

of suspected individuals and at locations known to be frequented by drivers who have been drinking is even more effective.

The prevalence and impact of drug-affected drivers constitutes a significant problem. Drugs have been cited many times each year since 2005 as a causal factor of serious injury and fatal crashes in Tasmania. Adequate resources should be made available to enable police to conduct widespread tests to detect drug-affected drivers.

Careful attention must be given to the setting of speed limits, as there are glaring inconsistencies in this respect in some locations in Tasmania. It is a disconcerting fact that the condition of the majority of the roads in the Tasmanian highway network is considered unsuitable for a speed limit as high as 110km/h.

A re-evaluation of speed limits on all Tasmanian roads should be undertaken by experts. This should be accorded a high degree of priority to give drivers confidence in and respect for the laws they are required to obey. Laws that are perceived to be reasonable and appropriate will achieve greater compliance.

The erection and removal of temporary speed limit signs at roadworks sites should be given close and responsible attention by contractors to ensure they are used appropriately and removed as soon as they are no longer required. Speed limit signs erected during roadworks are often being left in place well beyond the completion of the work and there are many instances where speed de-restriction signs at the end of roadworks have not been erected. Such practices have the effect of causing motorists to lack respect for temporary speed limit signs generally. Careful monitoring and appropriate penalties for such breaches should be imposed.

Advantage should be taken of the opportunity to use variable speed limit electronic signage and technology. Such signs could be adjusted to reflect variations in traffic volume and conditions.

The use of mobile phones whilst driving motor vehicles is now recognised as being a distraction that has the potential to adversely impact on safe driving. The *Road Rules* have been amended recently, but may not be fully or widely understood. Additional research is needed on this subject and in relation to other similar devices in vehicles that are also capable of distracting drivers.

Truck rollover crashes are occurring on a disturbingly regular basis in Tasmania. The ARRB Group has the expertise and technology to investigate the causes of such crashes. The State Government should make greater use of their services to enable appropriate action to be taken to address issues arising from such assessments.

The visible presence of police patrol vehicles on roads provides an effective deterrent for motorists who may otherwise breach traffic rules or drive dangerously. There has been a commendable increase in the number of police vehicles on Tasmanian highways in recent times and adequate resources should be provided to enable further increases.

In November 2009, the Auditor-General presented a Special Report No. 85 dealing with the use of speed cameras. This report drew attention to the inappropriate locations and times at which some tests were conducted and made a number of recommendations that the Committee support. The report also found that lowering speed camera tolerances would reduce speeding. In this respect, it is interesting to note that since the lowering of speed camera tolerances in October 2009, revenue from traffic offence fines increased from $7.5 million in 2008-09 to $11.4 million in 2009-10.

The Committee received evidence in support of planning to be undertaken for the progressive upgrading of the Midland Highway to a four-lane divided carriageway along its entire length. This proposal was opposed by DIER on the basis that traffic volumes did not warrant this.

The Committee believes that the potential to reduce the number of serious casualty crashes should be the main determining criterion and that the upgrading of this highway, as proposed, would result in such a reduction.

Workplace safety management plans should include provisions relating to motor vehicle travel, for both heavy and light vehicles, where employees are required to drive a vehicle in the course of their duties.

The use of wire rope avoidance barriers is a controversial issue with many motorcyclists. The Committee recommends that government support be provided for research into the most appropriate type of barriers for use in Tasmania.

The rights and safety of cyclists are often overlooked in road use and planning. Positive action should be taken in road planning and design, in education and in publicity to promote the interests of cyclists.

The increasing popularity of off-road motorcycle activity has resulted in an unacceptably high number of serious injuries on a regular basis, including some fatalities. Apart from the suffering and loss that flows from this, the emergency treatment required for so many motorcyclists imposes great strain on the resources of hospitals – especially at weekends – resulting in the treatment of other patients being deferred.

Notwithstanding Tasmania's standards of road crash data collection being praised by interstate experts as among the best in Australia, the Committee's investigations highlighted some gaps in this area, especially in relation to serious injuries. A 'serious injury' is defined as a person being admitted to hospital for more than 24 hours and not in terms of the actual severity or scale of the injury sustained. Furthermore, differing definitions and hospital admission criteria among the Australian States and Territories make serious injury data incompatible and unsuitable for comparative purposes. It is vital that standardised methods of collecting data on road crashes and their consequences be developed to ensure researchers and policy makers can be properly informed.

In the Committee's view, there is no doubt that road crash fatalities and serious injuries impose and enormous emotional, physical and financial burden on the

individuals directly involved, their families, friends and the wider Tasmanian community.

While targeted driver education and training, especially of novice drivers, will play a big part in reducing the number of road crashes, there is also a need for a broader public education campaign for road users of all ages. This should include, among many other issues, information about how to deal with a variety of weather conditions and road surfaces, how to recognise and avoid potentially dangerous situations, the most effective means of dealing with a skidding vehicle and, importantly, how to render assistance at the scene of a road crash.

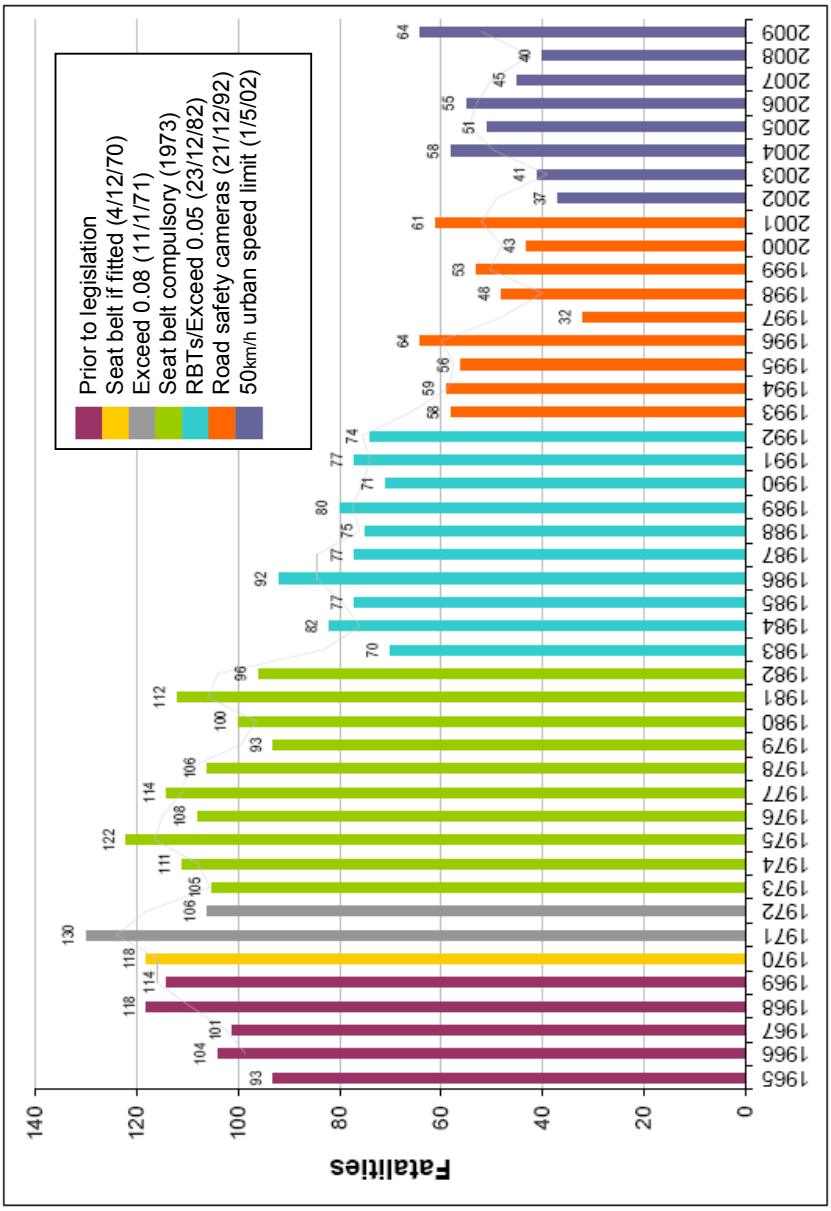
The Committee believes strongly that the support and cooperation of various sections of the media would be crucial to the success of such a campaign and their input should be sought at an early stage in its development.

Finally, the Committee wishes to commend the Motor Accidents Insurance Board (MAIB) for its contribution to the promotion of road safety within the Tasmanian community and for its dedicated and ongoing support of those who are injured in road crashes. Much of this work by the MAIB goes unnoticed and unheralded, but it is deserving of our acknowledgement and appreciation.

Hon. Don Wing MLC
CHAIR

13 October 2010

Distribution of Tasmanian Road Crash Fatalities, 1965-2009[1]



[1] Adapted from 'Distribution of Fatalities and Serious Injuries for 1 January 1977 – 31 December 2007' (document d1) and 'Tasmanian Road Safety Strategy 2007-2016', fig. 3, p. 14 (document d3)

FINDINGS AND RECOMMENDATIONS

Findings

The Committee found that –

1. The safe systems approach to road safety is appropriate for Tasmania.

2. The Government has changed its view in deciding to have one road safety body, as in evidence Mr Hogan and Mr Green defended the then-Government policy of having two separate entities.

3. There is an advantage in amalgamating the Road Safety Task Force and the Road Safety Council into the Road Safety Advisory Council, subject to the resources of the RSAC being not less than the total of the two previous bodies.

4. MAIB funding to the RSTF and revenue raised through the Road Safety Levy have been important factors in the promotion and support of road safety.

5. Data reveals males are significantly over-represented in serious casualty crashes in all age groups, but particularly in the 17 to 25 age group.

6. The number of serious casualties in Tasmania has seen an overall reduction since 2000.

7. In 2009, the number of fatalities was high compared to other years in the last decade.

8. The consequences of road crashes impose significant costs on the health system, as well as the physical, psychological, financial and human cost associated with crashes.

9. The main factors causing road crashes are inexperience, inattention excessive speed and alcohol.

10. The DPEM policy of not having qualified accident investigators attend every serious casualty crash, particularly in rural areas, and inadequate numbers of accident investigators is contributing to quality control problems and potentially inconsistent assessments of crash causes.

11. Suicide appears to be an under-recognised cause of fatal crashes, although it is often difficult to determine this fact.

12. Over the last decade, fewer serious casualty crashes have occurred during the months of July, August, September and October, and on Mondays, Tuesdays and Wednesdays.

13. Tasmania does not have a traffic fatality registry.

14. Since 2005, Tasmania has been above the national average in terms of road crash deaths per 100,000 population, per 10,000 registered vehicles and per 100 million vehicle kilometres travelled.

15. In relation to alcohol, speed, inattention and inexperience, there has been no abatement in the last ten years in the frequency of these factors being cited as contributing to crashes in Tasmania.

16. In view of the over-representation of young drivers in road crash statistics, it is both surprising and regrettable that there is no compulsory driver education course in Tasmania.

17. Novice drivers would benefit considerably from undertaking a compulsory driver education course.

18. DIER's intransigent failure to require novice drivers to undertake a driver education course is unacceptable and contrary to the weight of evidence received by the Committee and the objectives of road safety.

19. The imparting of knowledge through a compulsory driver education course would assist in mitigating novice drivers' lack of experience, a major causal factor of road crashes.

20. There is no 80km/h speed restriction applied to provisional licence holders in other Australian States and Territories.

21. There is lack of uniformity in the specific requirements and restrictions applied to novice drivers among Australian jurisdictions.

22. The novice motorcycle rider licensing process in Tasmania is more rigorous than for novice drivers, and it is astounding that a similar model is not in place for novice drivers.

23. The weight of evidence presented to the Committee favours retention of the 0.05 BAC level.

24. Drug-driving is becoming an increasing problem.

25. Evidence shows that young male drivers are particularly over-represented in serious casualty crashes involving alcohol.

26. Contractors have regularly failed to ensure temporary speed limit signs at roadworks sites are appropriately and effectively used, in compliance with regulations and other requirements, and removed at the conclusion of works.

27. There are surprising inconsistencies in the setting of speed limits in some locations in Tasmania.

28. Variable speed limit technology and electronic signage are effective road safety measures.

29. The majority of the Tasmanian highway network is unsuitable for a speed limit of 110km/h.

30. Mobile phones have become another distraction that has the potential to adversely impact on safe driving.

31. The latest amendment to the *Road Rules* relating to mobile phone use in vehicles is intended to improve safety.

32. Additional research is needed to ascertain the extent of driving impairment caused by mobile phone use, the use of other similar devices capable of distracting drivers (such as MP3 players) and whether hands-free usage is necessarily safe.

33. Road safety is an occupational health and safety issue for employers and employees.

34. Road safety is not consistently included in workplace safety management plans.

35. Where employees are required to travel in a motor vehicle in the course of their duties road safety must form an integral part of a workplace safety management plan.

36. Truck rollover crashes occur regularly on Tasmanian roads and have resulted in death and serious injury to drivers and other road users. Log trucks appear to be over-represented in rollover crashes.

37. Underrun protection fitted to heavy vehicles can reduce the severity of the injuries sustained during a crash by avoiding or reducing the other vehicle's contact with rigid structural parts of the heavy vehicle and the risk of being crushed.

38. A voluntary approach to underrun protection is contained in the 'Tasmanian Heavy Vehicle Safety Code'.

39. Licence disqualification is a more effective deterrent than monetary penalty options.

40. The visible presence of police vehicles on roads acts as an integral and effective deterrent to road users committing offences and engaging in unsafe risk-taking.

41. A disturbing number of disqualified drivers persist in driving on public roads.

42. Penalties imposed on disqualified drivers are often an inadequate deterrent.

43. Generally, penalties for traffic offences in Tasmania are lower than for equivalent offences in other Australian jurisdictions.

44. Tyre defects and incorrect tyre pressures are real though less frequently cited factors contributing to road crashes.

45. Vehicle defects are a contributing factor to road crashes, though also less frequently cited.

46. Tasmania has the oldest vehicle fleet in Australia.

47. Newer vehicles with higher ANCAP ratings are an important factor in road safety.

48. The use of headlights in foggy or other hazardous weather conditions and in fair weather improves the visibility of the vehicle to other road users.

49. Fixtures adjacent to roads without avoidance barriers constitute potential hazards to road users.

50. The AusRAP program provides design standards that if adopted could significantly improve the quality and safety of Tasmanian highways.

51. On many sections of the Midland Highway, the surface condition has deteriorated to an unacceptable extent.

52. Road maintenance of many Tasmanian roads has been inadequate.

53. The progressive upgrading of the Midland Highway to a divided carriageway, along its entire length, would reduce the risk of head-on crashes.

54. Ongoing research is needed to determine the most appropriate type of avoidance barriers to use throughout the road network.

55. Cyclists are a vulnerable group of road users.

56. There is a lack of public awareness and understanding of the rights of cyclists as road users.

57. There is a lack of education and training programs for cyclists to prepare them for sharing the road network.

58. Consideration for cyclists in road design, upgrading and maintenance has been generally inadequate.

59. The current arrangements regarding the emergency services' response to road crashes is appropriate.

60. A significant number of road crash victims die at the scene as a result of an obstructed airway and/or bleeding.

61. Basic first aid delivered at the scene can improve outcomes for road crash victims.

62. The Motor Accidents Insurance Board's 'no-fault' insurance policy operates efficiently and effectively for victims of road trauma and meets the long-term health needs of those with catastrophic injuries.

63. The MAIB contributes substantial funding to road safety, to awareness and to police operations.

64. Data pertaining to off-road motorcycle crashes is unreliable due to inaccurate reporting and under-reporting of these incidents to the authorities.

65. Nevertheless, many motorcyclists are injured in off-road motorcycle crashes.

66. The nature and number of off-road motorcycle injuries imposes a significant burden upon hospital resources and professional personnel.

67. Off-road motorcycle activity is under-regulated in Tasmania.

68. Pedestrians are a vulnerable group of road users.

69. Vehicle design and speed limits in areas of pedestrian activity reduces the severity and number of crashes involving pedestrians.

Recommendations

The Committee recommends that –

1. The MAIB be encouraged to continue their funding for road safety initiatives.

2. On the cessation of the Road Safety Levy in 2012, the State Government make available at least an equivalent amount (indexed) as raised through all traffic infringement penalties, including SCINs, for road safety.

3. A national uniform standard of collecting serious injury data be developed and that the Minister for Infrastructure raise this issue at the Australian Transport Council.

4. Tasmania Police adopt a policy to ensure that all serious car crashes are attended, assessed and investigated by qualified accident investigators.

5. Adequate resources be made available for accident investigation to ensure sufficient qualified investigators are available to implement this policy.

6. A road trauma registry be developed for Tasmania.

7. Driver education and road safety strategies focus particularly on inexperience, inattention, alcohol and excessive speed.

8. There be an approved compulsory driver education course for novice drivers in Tasmania prior to obtaining a L1 licence.

9. Incentives be provided to holders of P1 licences who undertake additional driver education courses. Such incentives should not include altering the zero BAC restriction.

10. The Minister for Infrastructure, through the Australian Transport Council, take steps to achieve national uniformity in relation to novice driver licensing restrictions and regulations.

11. The speed restriction for L1, L2 and P1 drivers in Tasmania be raised to 90km/h, as a first step towards national uniformity.

12. There be an evidence-based review of the number of logbook hours learner drivers be required to complete.

13. Legislation and regulations be formulated to empower the courts, in appropriate cases, to require the installation of alcohol interlock devices in the vehicles of repeat drink-driving offenders.

14. The number of random drug tests be increased.

15. Third and subsequent repeat drink-driving offenders be required to undergo mandatory treatment for their alcohol abuse.

16. The age at which novice drivers be permitted to drive with a BAC above zero be raised.

17. The 0.05 BAC restriction for unrestricted drivers remain unchanged.

18. All Tasmanian highways that are not divided, dual carriageway, with run-off road protection and, where necessary, central barriers should have a maximum speed limit of 100km/h, unless independent expert advice from a body such as the ARRB Group or MUARC determines that a speed limit of 110km/h is appropriate.

19. The State Government and DIER review the maximum speed limit for heavy vehicles using major Tasmanian highways.

20. There be a penalty imposed on contractors or other persons who are responsible for failing to comply with regulations and other requirements, and who fail to remove speed limit signs at the conclusion of roadworks.

21. Variable speed limit signage be used more extensively.

22. Due to the dangers of using mobile phones whilst driving, new provisions in the *Road Rules* and the associated penalties be regularly reinforced through public awareness campaigns.

23. Additional research be undertaken to ascertain the extent of driving impairment caused by mobile phone use, the use of other similar devices in vehicles (such as MP3 players) and whether hands-free usage is necessarily safe.

24. A workplace safety management plan must include provisions relating to motor vehicle travel where employees are required to drive a vehicle in the course of their duties.

25. Fatigue management policies be implemented by employers of employees who are required to drive light vehicles in the course of their duties in a manner similar to the law relating to heavy vehicles.

26. The ARRB Group be engaged to investigate all truck rollover crashes where the cause is not clearly established and the State Government take appropriate action to address issues arising from such assessments.

27. The State Government move towards requiring heavy vehicles to be fitted with underrun protection.

28. Heavy vehicle rigid licensing arrangements include instruction and advice relating to heavy vehicle safety and stability when a licence is issued and also when a licence is renewed.

29. The substance of the recommendations in the Auditor-General's Special Report no. 85 on speed detection devices be implemented.

30. Penalties imposed for driving whilst disqualified should be such as to provide a greater deterrent and reflect the seriousness of the offence.

31. There be an ongoing commitment to provide additional resources to Tasmania Police to ensure there is an even greater increase in the visible presence of police on Tasmanian roads.

32. The State Government develop policies designed to reduce the average age of the vehicle fleet on Tasmanian roads to ensure a greater proportion of vehicles have modern safety features.

33. All vehicles be required to undergo a roadworthiness inspection at 10 years from the date of production, again at 15 years, and annually thereafter.

34. There be a public education and awareness campaign focussing upon tyre defects and tyre pressures.

35. The use of headlights in foggy and other hazardous weather conditions be enforced in accordance with the terms of the *Road Rules* and that this be promoted through a public education program.

36. The use of headlights during the daytime in fair weather be encouraged but remain voluntary.

37. The Midland Highway be progressively upgraded to a four-lane divided carriageway along its entire length.

38. The State Government develop a rolling ten-year strategy to facilitate the recommended upgrade of the Midland Highway.

39. Upgrades, repairs and maintenance undertaken on Tasmanian roads should be evaluated prior to commencement to ensure contemporary treatments and infrastructure is applied.

40. Government support be provided for research into the most appropriate types of avoidance barriers.

41. Public awareness campaigns be implemented to better inform all road users of specific issues related to cyclists.

42. Education and training programs for cyclists be developed and implemented at primary school level and for all cyclists using the road network.

43. Planning for cycleways be considered in road design, upgrading and maintenance.

44. Approved first aid courses be offered to all applicants for a driver's licence of any class in Tasmania, with a financial incentive provided to those who complete such a course.

45. Carriage of a secured fire extinguisher in all vehicles be encouraged.

46. Wherever practicable, ambulance service personnel photograph crash scenes to assist other emergency medicine practitioners in the identification of injuries that may not be otherwise apparent.

47. Adequate resources and services be made available to treat the psychological and emotional consequences of road crashes.

48. Licensing regulations for off-road motorcycle use on public land be introduced along similar lines to those applicable to recreational boating in Tasmania.

49. The State Government request COAG to take such action as may be necessary to regulate the importation into Australia of motorcycles primarily intended for off-road use by ensuring that they comply with minimum acceptable design and safety standards.

50. There be a public education campaign to inform riders of the proper and safe usage of off-road motorcycles.

51. There be ongoing development of vehicle design to reduce pedestrian serious casualties.

52. There be a public awareness campaign to raise awareness of pedestrian safety issues and to encourage pedestrians to wear highly visible clothing.

1 Introduction

Establishment and Terms of Reference – 46th Parliament

On 26 August 2008 the Legislative Council resolved that a select committee ("the Committee") be appointed, with the power to send for persons and papers, with leave to sit during any adjournment of the Council, and with leave to adjourn from place to place to inquire into and report upon the issue of road safety, and, in particular –

1. The main causes and effects of road traffic crashes and off road motor cycle crashes in Tasmania.

2. The short and long term care of crash casualties and the adequacy of the current data collection.

3. The adequacy and effectiveness of current road safety measures in Tasmania.

4. Road safety measures, adopted, proposed or recommended interstate and in some overseas countries which have relevance to circumstances in Tasmania.

5. The methods and means whereby road traffic crashes in Tasmania may be reduced.

6. Appropriate measures to control the use of motor cycles off road for the purpose of reducing casualties; and

7. Any matters incidental thereto.

The Committee comprised four Members of the Legislative Council: Mr *Dean*, Mr *Harriss*, Ms *Forrest* and Mr *Wing* (Chair).

On 12 February 2010 His Excellency the Governor prorogued the Houses of Parliament and dissolved the House of Assembly in order for a general election of the House of Assembly to take place. Prorogation, which has the effect of suspending all parliamentary business including committee proceedings, *ipso facto* caused the Committee's Terms of Reference to expire.

Re-Establishment and Terms of Reference – 47th Parliament

On 4 May 2010 the Legislative Council resolved to re-establish the Committee with the same members and with the same Terms of Reference and also resolved to refer evidence from the previous Committee to this Committee. The Committee re-elected Mr Wing as its Chair.

Reasons for Establishing the Committee

In moving to establish the select committee, Hon Don Wing MLC said:

> *"There are two government-appointed committees dealing with road safety, the Road Safety Task Force and the Road Safety Council. They are committees that are quite representative of the Government, departments including the police force, the RACT and the community. I appreciate the good work that is done by those committees and the amount of research and inquiry that they have done but I believe that it is appropriate now, after a gap of some 21 years, that a parliamentary committee of this House look at this matter from the perspective of the Parliament to take a new look at this longstanding problematical area of government affecting the community to such a serious extent."*[2]

He continued:

> *"The 1987 select committee report found that the main factors in road safety were attitude, driver education and training, and it is my belief that those are still the main factors. Those matters have been given attention. I feel that the random breath testing and speed camera legislation implementation have each had an effect on the attitude of drivers but, in my view, there has been inadequate attention given to driver education and training."*[3]

In speaking in support of the motion, Hon Ivan Dean MLC said:

> *"Here we have, Madam President, a very serious issue. I do not think that anybody in this Chamber would say that we do not need to give greater attention to road safety, that we need to look at road safety going into the future as to what we can do, where we ought to be proceeding… If this committee in its work can come back with some very strong, good recommendations for us to consider, we will do that."*[4]

Events of 9 July 2009, when nine fatalities occurred on Tasmanian roads on that one day alone, served to re-emphasise the importance of developing solutions to road safety through this inquiry.

Proceedings

The Committee called for public submissions, placing advertisements in Tasmanian daily newspapers on 30 August 2008. In total, 76 submissions were received.

Hearings were held during October 2008 and March, May, June and August 2009, with 82 witnesses presenting verbal evidence. One additional witness gave evidence in May 2010 in Burnie. In total, the Committee met 49 times from 2008 to 2010, holding meetings in Hobart, Launceston, Devonport and Burnie.

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[2] Legislative Council *Hansard*, 26 August 2008, p. 23
[3] Legislative Council *Hansard*, 26 August 2008, p. 23
[4] Legislative Council *Hansard*, 26 August 2008, p. 38

The Committee also travelled to Melbourne, Adelaide, Sydney and Canberra from 27 January to 4 February 2009 and met with 47 stakeholders during this time.

The prorogation of the Tasmanian Parliament for the State Election had the effect of suspending the Committee's proceedings from 12 February 2010 until the Committee was re-established on 4 May 2010.

Details of submissions received, witnesses examined, documents taken into evidence and Minutes of Proceedings are contained in appendices to this Report in Volume 2.

Interim Report

On 17 December 2009 an *Interim Report* was presented to the President of the Legislative Council.[5] It focused upon four aspects of road safety which the Committee viewed as being key issues, specifically speed limits on Tasmanian highways, alcohol and drink-driving, the visible presence of police on the roads and driver education and training.

The *Interim Report* contained six recommendations, that:

1. *The State Government seek independent advice from either the Australian Road Research Board (ARRB) Group, the Monash University Accident Research Centre (MUARC), or both organisations, to determine what the maximum speed limit should be on the whole, or any sections of, the national highway network in Tasmania.*

2. *Existing penalties for repeat drink-driving offenders be substantially increased.*

3. *For the purposes of detecting drink-driving offences police place more emphasis on targeting individuals known to be likely offenders and those near locations or public events where alcohol is likely to be consumed.*

4. *Additional funding and resources be made available to Tasmania Police to ensure there is an increased visible presence of police on Tasmanian roads.*

5. *Road safety and driver awareness be included in the curriculum in all Tasmanian schools beginning at the primary school level.*

6. *All learner drivers be required to participate in a regulated driver education and training course, either through the education system or an approved education and training provider.*

[5] Parliamentary Paper No. 56 of 2009

A Note on Definitions

This Final Report contains road crash statistics for Tasmania sourced from the Department of Energy, Infrastructure and Resources (DIER). When collating road crash deaths and injuries, the Department has applied the following definitions to those statistics –

> *A '**road crash**' is defined as an event that must meet the following conditions:*
>
> - *Involve at least one vehicle;*
> - *Have occurred on a road or road-related area as defined in the Australian Road Rules;*
> - *The location must not be closed to public movement;*
> - *The event must not have involved deliberate attempt to cause harm; and*
> - *The event must have resulted in bodily injury to a person, vehicle damage or property damage caused by a vehicle.*
>
> *A **serious injury crash** is a crash in which at least one person has been admitted to hospital for 24 hours or more.*
>
> *A **fatal crash** is a crash in which at least one person dies within 30 days of the crash.*[6]

DIER's statistics and publications also refer to **serious casualties**, **serious crashes** or **serious casualty crashes**, which are terms the Department uses when combining the number of serious injuries and fatalities into the one total figure.

Appreciation

Members of the Committee wish to express their appreciation to the Committee's Secretary, Mr Nathan Fewkes, for the diligent and efficient manner in which he has discharged his duties and to the Clerk of Committees, Mr Tom Wise, for his valued assistance. The Committee is also grateful for the assistance provided by all who have given evidence, made submissions and assisted in any way.

[6] Information provided by DIER, 17 March 2009

2 Road Safety Strategy and Governance

Virtually all Tasmanians are regular users of the road transport system for travel to and from home, work, services, school, or social events. For others, the road is also their place of work. In Tasmania, the lives of many individuals and the community at large continue to be affected as a result of road crash deaths or serious injuries.

The Committee wishes to emphasise that road crashes represent more than mere figures and statistics. Each represents many stories of personal experiences of sorrow and suffering that cannot be fully conveyed within these pages.

In 2009 there were 64 road crash fatalities in Tasmania. This represents an alarming 64 per cent increase above the 39 fatalities in 2008 and is also higher than the preceding five-year average of 49.6 fatalities per year. There has, however, been a long-term reduction of road crash fatality levels in Tasmania, which peaked at 130 deaths in 1971.

There were 287 road crash serious injuries in 2009 – ten more than in 2008 – though below the preceding five-year average of 334.8 per year from 2004 to 2008.[7] In the 1970s, by comparison, over 1,000 serious injuries were being reported each year in Tasmania.[8]

As well as having an emotional cost, road crashes also involve an economic cost. It has been estimated that road crashes cost the State around $500 million per year.[9] The Motor Accidents Insurance Board (MAIB), which provides a no-fault compulsory personal injury insurance scheme for Tasmanian motorists and provides benefits to people injured in road crashes, has received over 34,000 claims and has paid just over $700 million in claim payments over the financial years 2000-01 to 2009-10.[10]

There are both national and State road safety strategies in place that aim to reduce road crash deaths and injuries. Tasmania's strategy calls for road safety to be a *"shared responsibility"*, whereby drivers, road designers and managers, and vehicle manufacturers and designers *"all have a part to play"*.[11] According to DIER's submission, the State's strategy is one based on the safe systems approach to road safety.[12]

The safe systems approach, although lacking a precise definition, essentially involves designing a road system that accommodates human error and aims to

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[7] DIER, 'Tasmanian Crash Statistics: Fatalities 2009' and 'Tasmanian Crash Statistics: Serious Injuries 2009', at <http://www.transport.tas.gov.au/safety/crash_statistics> [accessed February 2010]

[8] Information provided by DIER, 3 December 2008

[9] DIER, 'Tasmanian Road Safety Strategy 2007-2016', June 2007 (document d3), p. 5

[10] Information provided by MAIB, 29 January 2009 and 7 July 2010. See also Chapter 15. Note: claim payments do not necessarily correlate with claims received in the same year, as claims may be paid out over many years.

[11] DIER, 'Tasmanian Road Safety Strategy 2007-2016', June 2007 (document d3), p. 14

[12] DIER, submission, p. 1

ensure that in the event of a crash the impact is insufficient to cause serious injury or death to road users.[13] The Organisation for Economic Cooperation and Development (OECD) has recommended that governments should adopt, in-principle, the safe systems approach to road safety.[14]

The other significant aspect of the State's strategy and the safe systems approach is the move away from a traditional emphasis on modifying driver behaviour to improve road safety. The strategy asserts that:

> *"Historically we have been very successful in modifying driver behaviour through a combination of education, legislation and enforcement. Driver behaviour initiatives… have resulted in significant reductions in road trauma over the past few decades. However evidence suggests that these kinds of strategies alone will only result in very modest decreases in road trauma in coming years."*[15]

There were, however, witnesses who testified that the combination of driver behaviour measures outlined above should in fact be the primary means employed to reduce road trauma, as drivers are at fault for crashes. Other witnesses supported the adoption of the safe systems approach and, in some cases, argued that road safety policy in Tasmania remains too focussed on measures aimed at driver behaviour. The Committee has had, therefore, two opposing arguments placed before it as to how reducing road trauma should be achieved.

Tasmanian Road Safety Strategy 2007-2016

According to DIER's submission, Tasmania's Road Safety Strategy has been "*based on the safe system approach*" that accepts "*drivers and riders on the road make mistakes and that crashes will occur*."[16] It was developed with advice and input from the Monash University Accident Research Centre (MUARC),[17] an organisation that describes itself as *"Australia's largest multi-disciplinary research centre specialising in the study of injury and injury prevention."*[18] Dr Bruce Corben (MUARC), who is also a member of the Tasmanian Road Safety Council (TRSC), said that the adoption of safe systems in Australia has sought to capitalise on the best features of Swedish and Dutch strategies, known as Vision Zero and Sustainable Safety respectively, *"because of the success that they have had and the well-founded thinking that goes into their approach."*[19]

The Minister's Foreword in the Road Safety Strategy states that *"we need to adopt a new approach that refuses to tolerate preventable injury and death."*[20]

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[13] OECD/International Transport Forum, *Towards Zero: Ambitious Road Safety Targets and the Safe System Approach* (OECD Publications, Paris, 2008), p. 19

[14] OECD/International Transport Forum, *Towards Zero: Ambitious Road Safety Targets and the Safe System Approach* (OECD Publications, Paris, 2008), pp. 194-195

[15] DIER, 'Tasmanian Road Safety Strategy 2007-2016', June 2007 (document d3), p. 14

[16] DIER, submission, p. 1

[17] DIER, submission, p. 1

[18] 'About MUARC', at <http://www.monash.edu.au/muarc/about/> [accessed September 2010]

[19] Mitsopoulos-Rubens *et al*, transcript of discussion, 28 January 2009, p. 5

[20] DIER, 'Tasmanian Road Safety Strategy 2007-2016', June 2007 (document d3), p. 2

The Strategy identifies three key elements of a shared responsibility for road safety, namely drivers, roads and vehicles. The role of each has been explained in the Strategy as follows:

> *"As drivers, we all have a responsibility to obey the road rules to the best of our abilities. However, drivers are human, and humans make mistakes, and the human body can only withstand a certain level of force before sustaining serious injuries.*
>
> *Road designers, managers and regulators have responsibility to provide a safe road environment. Our road environment needs to be forgiving of error and protect us from injury when mistakes occur.*
>
> *The vehicles we travel in should assist us to drive safely and not contribute to injuries if we crash. Vehicle manufacturers, designers and fleet owners have a critical role to play."*[21]

On the basis of this principle of shared responsibility, the Strategy sets out *"four key strategic directions"* identified through expert advice to DIER as most effective in targeting crash problems in Tasmania and reducing serious casualties.[22]

These strategic directions are:

- Safer travel speeds;
- Best practice infrastructure;
- Increased safety for young road users; and
- Enhanced vehicle safety.[23]

The Strategy explains why each is significant to road safety and how a road safety benefit is envisaged:

> *"**10.1 Safer Travel Speeds***
>
> *Speed is the most critical factor in determining the forces the human body is exposed to in the event of a crash. Faster vehicle speeds at the time of a crash mean that the body must absorb more energy on impact. Vehicle speed influences the likelihood of a crash occurring and the severity of injuries sustained in a crash.*
>
> *[…]*
>
> *In order to achieve reductions in serious casualties, research and best practice suggests a number of options to achieve lower vehicle speeds, including:*

[21] DIER, 'Tasmanian Road Safety Strategy 2007-2016', June 2007 (document d3), p. 14
[22] DIER, submission, p. 2
[23] DIER, 'Tasmanian Road Safety Strategy 2007-2016', June 2007 (document d3), pp. 15-16

- *Lowering speed limits;*
- *Increasing the number of speed cameras;*
- *Modifying infrastructure to force lower travel speeds; or*
- *Educating people to drive more slowly.*
- *The best results will be delivered through a combination of measures.*[24]

[…]

10.2 Best Practice Infrastructure

The design and installation of best practice infrastructure on the road network plays a key role in creating a safe road environment. Both Sweden's Vision Zero and the Netherlands' Sustainable Safety approach recognise that human error in the road environment is inevitable, and that infrastructure should accommodate this error and minimise the consequences.

Appropriate infrastructure becomes increasingly important on high-speed routes with high traffic volumes. In this situation, large numbers of road users are continuously exposed to travel speeds that far exceed human biomechanical tolerances, therefore increasing the risk of a serious crash occurring.

[…]

Research and best practice identify a number of infrastructure measures that enhance safety including:

- *Separation of opposing vehicles in high-speed settings (>70 km/h zones), using flexible barriers;*
- *Roadside barriers;*
- *Roundabouts at intersections in both urban and rural settings;*
- *Safer roadside areas;*
- *High standards of delineation;*
- *Sealed shoulders in rural areas;*
- *Consistently high skid resistance of road pavements; and*
- *Comprehensive coverage of roadside hazards using crashworthy barriers.*

[24] DIER, 'Tasmanian Road Safety Strategy 2007-2016', June 2007 (document d3), p. 17

To provide value for money, infrastructure treatments need to be targeted to areas where the greatest protection can be provided to the most drivers. A number of the above options may be appropriate for use in Tasmania, depending on issues such as crash type, location, terrain and traffic volume. Although infrastructure treatments are relatively expensive, they are very effective in reducing road trauma, and the benefits are long lasting.

[…]

10.3 Increased Safety for Young Road Users

Young road users aged 16-25 years are heavily over-represented in Tasmanian crash statistics. On average, between 1996-2005 young road users comprised over a third of all serious casualties, and was the largest group of road user serious casualties in Tasmania.

[…]

… While they represent only a small proportion of licensed drivers, young, newly licensed drivers have a substantially greater risk of crashing compared to drivers from older age groups.

[…]

Based on research and best practice, the safety of Tasmania's young newly licensed drivers could be significantly improved through further strengthening of the graduated licensing system through measures such as: increasing the number of hours of supervised driving experience during the learner phase; and introducing night-time driving restrictions (curfews); and peer-passenger restrictions during the provisional licence stage. The strongest safety benefit would be demonstrated if such measures were introduced as a package.

[…]

10.4 Enhanced Vehicle Safety

Improving the safety features of light vehicles has enormous potential to reduce serious road trauma. Increasingly sophisticated safety features in cars offer greatly improved occupant protection in the event of a crash. Research estimates that if everyone drove the safest car in each vehicle class (small, medium, large) road trauma involving light passenger vehicles could be reduced by 26%. For cars sold in the last few years, the risk of death or serious injury for drivers involved in a tow-away crash is less than half of the risk for cars built in the early 1970s.

[…]

Improved vehicle safety in Tasmania can be achieved by:

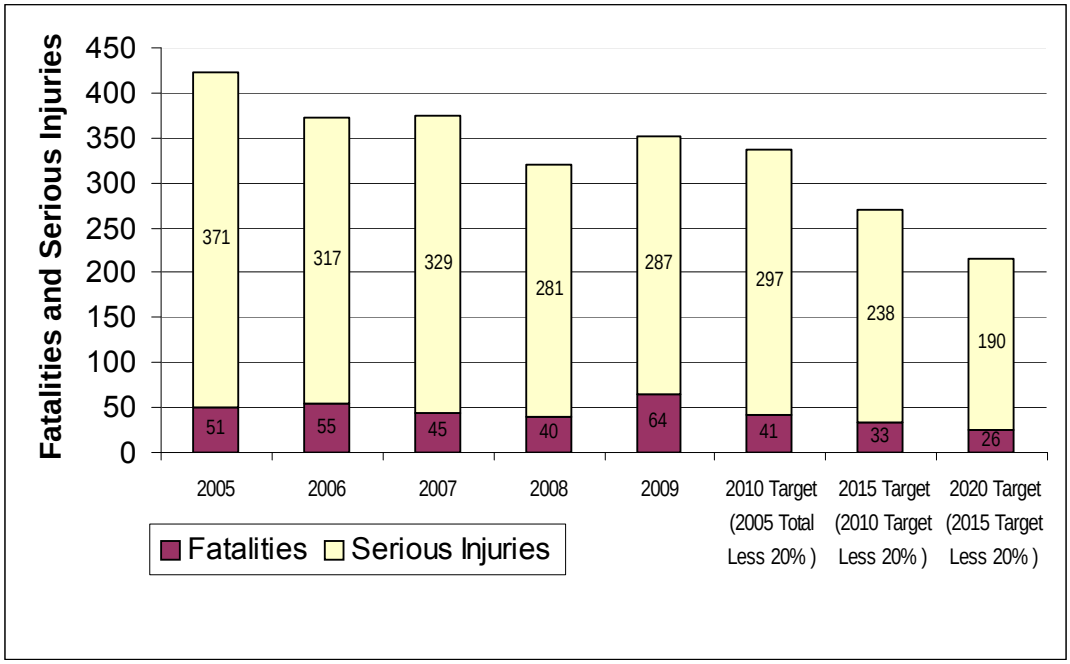
- *State and Local Governments and large corporate fleet owners committing to purchase the highest level of safety features in their vehicles; and*

- *Educating consumers about the benefits of vehicle safety features."*[25]

In addition, the Strategy notes that certain existing measures will continue. Namely, these are: the enforcement of road safety laws, improvements to the road environment and partnerships between government and private organisations that are involved with road safety and public education.[26]

The Strategy's target is to reduce serious casualties by 20% every five years until 2020.[27] The chart below provides an indication of these targets in numerical terms if related directly to 2005 totals (rather than as a five year median).

Tasmania: Progress Towards Road Safety Strategy Targets



Source: adapted from Tasmanian road crash statistics

Mr Alex Jerrim, of the consultancy firm Driver Safety Services, told the Committee that in his view *"we probably have to look more at behavioural outcomes"* because the State does not have *"squillions of dollars"* to spend upgrading road infrastructure.[28] DIER's submission acknowledged that economies of scale is an issue, stating that although there are best practice measures that could be implemented, some are unsuitable *"due to the fact Tasmania is a small State with limited resources"*. Its submission explained that as a result, only evidence-based, targeted initiatives with demonstrated potential to save lives have been pursued.[29]

[25] DIER, 'Tasmanian Road Safety Strategy 2007-2016', June 2007 (document d3), pp. 16-19
[26] DIER, 'Tasmanian Road Safety Strategy 2007-2016', June 2007 (document d3), pp. 12-13
[27] DIER, 'Tasmanian Road Safety Strategy 2007-2016', June 2007 (document d3), p. 4
[28] Ling and Jerrim, transcript of evidence, 14 October 2008, p. 91
[29] DIER, submission, p. 3

Australian and International Road Safety Approaches

As has been noted earlier in this Report, road safety strategic thinking in Australia and internationally has been guided by the safe systems approach, from which Tasmania's current Road Safety Strategy has been derived. Term of Reference 4 requires the Committee to examine road safety measures in place interstate and internationally. The purpose of this section is to establish a point of reference, for comparative purposes, to gauge where Tasmania's strategic approach is different or in common with other jurisdictions.

A 2008 OECD report stated that *"a consensus is emerging across the OECD that a fundamental shift in road safety management to a safe system approach is now required."*[30] Though noting that in practice the "*specific details vary*", according to the report safe systems approaches typically:

- *"Aim to develop a road transport system better able to accommodate human error. This is commonly achieved through better management of crash energy, so that no individual road user is exposed to crash forces likely to result in death or serious injury.*

- *Incorporate many strategies for better management of crash forces, with a key strategy being road network improvements in conjunction with posted speed limits, the latter set in response to the level of protection offered by the road infrastructure.*

- *Rely on strong economic analyses to understand the scale of the trauma problem, and direct investment into those programs and locations where the greatest potential benefit to society exists.*

- *Are underpinned by comprehensive management and communication structures incorporating all key government agencies and other organisations which have a role in determining the safe functioning of the transport system.*

- *Align safety management decision making with broader societal decision making to meet economic goals and human and environmental health goals, and to create a commercial environment that generates demand for, and benefits the providers of, safe road transport products and services.*

- *Embrace the ethos of 'shared responsibility' for road safety among the various actors of the road transport system, such that there is a shared vision amongst citizens, public, private and not for profit organisations regarding the ultimate safety ambition, and how to achieve it.*

[30] OECD/International Transport Forum, Towards Zero: Ambitious Road Safety Targets and the Safe Systems Approach (OECD, Paris, 2008), p. 108

- *[Sweden's] 'Vision Zero' is based on an ethical imperative to eliminate death and serious injury from the transport system. [The Netherlands'] 'Sustainable Safety' takes elimination of preventable accidents as the starting point and attaches greater weight to cost-effectiveness in determining interventions but argues that the utmost efforts must be made in building and maintaining road systems to ensure that future users, including in generations to come, are protected from harm."*[31]

Mr Lauchlan McIntosh (President, Australasian College of Road Safety) explained to the Committee the rationale for the safe systems approach:

> *"Too often, as we did in industry, we spend a lot of time blaming the worker. Too often in the road environment we spend a lot of time blaming the driver. There is no doubt that crashes occur because drivers make mistakes, they break the law or they are incompetent. However, many of the vehicles they drive are equally unsafe, the roads they drive on are unsafe or the systems in which we allow them to operate – and speed is a part of that system – are not necessarily safe for the conditions."*[32]

Australia has had in place a National Road Safety Strategy since 2001 and running until 2010. This strategy has been progressed through a series of two-year action plans. The current action plan for 2009-2010 describes Australia's approach as being "*guided by the safe system framework*", comprising safer speeds, safer roads and roadsides, safer vehicles, and safer road users and safer behaviour.[33] One point raised with a House of Representatives Committee that examined road safety in 2004 is that responsibility for matters the National Strategy seeks to address is in the realm of the States rather than the Federal Government.[34] The strategy contains the following main objectives:

- Improve user behaviour;
- Improve the safety of roads;
- Improve vehicle compatibility and occupant protection;
- Use new technology to reduce human error;
- Improve equity among road users;
- Improve trauma, medical and retrieval services;
- Improve road safety policy through research of safety outcomes; and
- Encourage alternatives to motor vehicle use.[35]

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[31] OECD/International Transport Forum, Towards Zero: Ambitious Road Safety Targets and the Safe Systems Approach (OECD, Paris, 2008), p. 108

[32] McIntosh *et al*, transcript of discussion, 4 February 2009, p. 2

[33] Australian Transport Council, 'National Road Safety Action Plan 2009-2010', p. 1 (document ACT.d15)

[34] House of Representatives Standing Committee on Transport and Regional Services, 'National Road Safety – Eyes on the Road Ahead', June 2004, p. 22

[35] Australian Transport Council, 'The National Road Safety Strategy 2001-2010', p. 4

The National Strategy "*aims to reduce the number of road fatalities per 100,000 population by 40%, from 9.3 in 1999 to no more than 5.6 in 2010*."[36] Nationally, in 2009, the road crash fatality rate per capita was 6.9 per 100,000; a difference of 1.3 above the target.

All states have set targets in their road safety strategies. NSW does not have a stand-alone strategic document, though has set a target in its State Plan. These targets are compared below:

Road Safety Strategies: Targets		
State/Territory	Strategic Document	Road Trauma Reduction Target
National	National Road Safety Strategy 2001-2010	Reduce the number of road fatalities per 100,000 population by 40%, from 9.3 in 1999 to no more than 5.6 in 2010
Victoria	Arrive Alive 2008-2017	Reduce deaths and serious injuries by 30% by 2017
New South Wales	NSW State Plan (2006); target S7	Reduce road fatalities to 0.7 per 100 million vehicle kilometres by 2016
Queensland	Road Safety Strategy 2004-2011	Less than 5.6 deaths per 100,000 population by 2011
South Australia	Road Safety Strategy 2003-2010	40% reduction in road fatalities by 2010
Northern Territory	Road Safety Strategy 2004-2010	Less than 15 fatalities per 100,000 population in 2010
Tasmania	Road Safety Strategy 2007-2016	By 2010: 20% reduction from 2005; by 2015: 20% reduction from 2010; by 2020: 20% reduction from 2015

The Committee was advised, however, that reaching ambitious targets might not be realistic. Dr Jeremy Woolley (Senior Research Fellow, Centre for Automotive Safety Research) said that future road trauma reductions would probably be achieved gradually:

> *"We will grab benefit wherever we can and we have sort of done all the easy things and we are reaching a plateau now where there are diminishing returns and it is harder and harder to make bigger reductions in road trauma."*[37]

States that have recently introduced or updated road safety strategies have endorsed the safe systems approach, specifically –

In Victoria:

[36] Australian Transport Council, 'The National Road Safety Strategy 2001-2010', p. 3
[37] Anderson *et al*, transcript of discussion, 30 January 2009, p. 14

"Victoria is formally incorporating the safe system approach to road safety into the Arrive Alive 2008-2017 strategy."[38]

In Western Australia:

"Towards Zero incorporates the safe system, which aims to improve road safety through four cornerstones: safe road use, safe roads and roadsides, safe speeds, and safe vehicles."[39]

And in the Australian Capital Territory:

"*The Vision for Road Safety in the ACT outlined three strategic goals. These strategic goals give rise to a set of strategic objectives which, mostly, follow the national approach of 'safe system' principles."*[40]

As such, by applying the safe systems approach to its Road Safety Strategy for 2007-2016, Tasmania's position is essentially consistent with current international and national practice.

Road Safety Governance in Tasmania

Responsibility for road safety policy and strategy in Tasmania rests with DIER with assistance from Tasmania Police, which also has responsibility for traffic law enforcement. The Tasmanian Road Safety Council and Road Safety Task Force also provide input and assistance for road safety and include non-government stakeholders among their membership.

DIER has responsibility for the Tasmanian Road Safety Strategy 2007-2016 and maintains a dedicated road safety Output, which according to the 2010-11 Budget Papers:

"…Develops and supports strategic road safety initiatives and provides policy advice; encourages community involvement in the road safety effort through the establishment of partnerships with local government and their associated community organisations and networks; and develops and delivers road safety education and awareness programs…"[41]

Ms Angela Conway (Manager, Land Transport Safety Policy, DIER) outlined for the Committee the organisational structure within the Department relevant to road safety:

"In our Department, we have a land transport safety division and the road safety effort that's directly called road safety sits in that division. There is a road safety section in my area, which is land transport and safety policy

[38] Victorian Government, 'Victoria's Road Safety Strategy: Arrive Alive 2008-2017', July 2008, p. 9 (document VIC.d1)

[39] Government of Western Australia, 'Towards Zero – Road Safety Strategy to Reduce Road Trauma in Western Australia 2008-2020', March 2009, p. 8

[40] ACT Government, 'ACT Road safety Strategy 2007-2010 and ACT Road Safety Action Plan 2007-08', 2009, p. 12

[41] 2010-11 Budget Paper No 2: Government Services Vol. 1, p. 6.11

which is the policy which oversights the development of the strategy and the action plans and putting them all together. Then we have our road safety operations area; they are the ones that run the community road safety partnership program and work with the schools and teachers delivering the classroom resource."[42]

Information provided by DIER to the Committee noted that other sections of the Department, such as transport inspection, public passenger transport, and registration and licensing, also contribute to road safety.[43]

Responsibility for traffic law enforcement is in the domain of Tasmania Police. The relevant Output in Budget Papers defines this role as:

"…*Improving traffic law compliance and driver behaviour through a combination of traffic law enforcement, high visibility patrols on highways and arterial roads, and the conduct of traffic operations. By targeting high-risk driver behaviour, the Department is focused on detection and reduction of the incidence of inattentive driving, the use of alcohol/drugs whilst driving, and offences involving speeding*."[44]

Tasmania Police explained in its submission that traffic enforcement issues and road safety is the responsibility of the Traffic Secretariat, which "*provides advice… to enable development of appropriate strategic direction in relation to those issues*."[45]

The Tasmanian Road Safety Council (TRSC) and the Road Safety Task Force (RSTF) are also involved with road safety, respectively by providing policy advice and oversighting expenditure of the Road Safety Levy;[46] and promoting road safety education and enforcement.[47] In its submission to the Committee, the TRSC had described its purpose and functions as follows:

"The TRSC was established in September 1999 as the principal road safety policy and consultative body in Tasmania with a particular focus on legislative and policy reform, input into national and State programs, and a focus on high-risk road users and behaviours. … The role of the TRSC is to provide community leadership and expert advice to the Minister for Infrastructure, in developing the Government's road safety agenda."[48]

The Road Safety Task Force, established in 1996, provided the Committee with the following description of its aims and activities:

"The aim of the RSTF is to reduce unsafe road user behaviour and assist to decrease the number of fatalities and the number and severity of injuries on Tasmanian roads through the development and implementation of an integrated public education and enforcement program. … The RSTF funds

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[42] McIlfatrick *et al*, transcript of evidence, 26 March 2009, p. 42
[43] Information provided by DIER, March 2009
[44] 2010-11 Budget Paper No 2: Government Services Vol. 2, p. 9.10
[45] DPEM, submission, p. 2
[46] TRSC, submission, attachment A
[47] 'About the Road Safety Task Force', at <http://www.rstf.tas.gov.au/about_us> [accessed September 2010]
[48] TRSC, submission

sixteen police officers within the State to assist with road safety education and enforcement and has a small executive team based in DIER which works with the board to produce advertising and marketing campaigns and events to support enforcement activities, all of which is underpinned by statistical analysis and research."[49]

Membership composition, as described below, shows a degree of semblance between the TRSC and RSTF, though the TRSC draws members from broader range of sources.

Tasmanian Road Safety Council Membership (as at December 2009)[50]

Hon Bryan Green MP (Chair); Penny Nicholls, General Manager Land Transport Safety DIER; Angela Conway, Manager Land Transport Safety Policy DIER; Tasmania Police A/Deputy Commissioner Scott Tilyard; Vince Taskunas, General Manager Public Policy and Communications RACT; Shaun Lennard, President Tasmanian Motorcycle Council; Roger Illingworth, Manager Magistrates Court – Coroners Division, Dept of Justice; Dr Bruce Corben, Senior Research Fellow MUARC; Dr Katrina Stephenson, Policy Director LGAT; Geraldine Allan, Community Representative; Jeremy Rockliff MP; and Tim Morris MP

Road Safety Task Force Board Membership (as at June 2010)[51]

Paul Hogan (Chair); Penny Nicholls, General Manager Land Transport Safety DIER; Angela Conway, Manager Land Transport Safety Policy DIER; Tasmania Police A/Deputy Commissioner Scott Tilyard; Tasmania Police Sgt David Sinclair; Greg Goodman, Group Chief Executive RACT; Peter Roche, CEO Motor Accidents Insurance Board

Neither Mr Hogan nor Mr Green agreed, when the Committee put the proposition, that amalgamating the Road Safety Task Force and the Tasmanian Road Safety Council would be beneficial. Mr Hogan said:

"Why are there two bodies? If you combined them both I think there would be too much on the agenda and you might lose your focus."[52]

Mr Green responded with the following view:

"The two bodies have clearly defined roles and I believe those roles are defined well enough to ensure that both bodies operate to concentrate on the areas of expertise they are good at."[53]

In the later stages of this Committee's inquiry, a media release issued by the Minister for Infrastructure announced that the TRSC and RSTF would be merged

[49] RSTF, submission, p. 1
[50] 'Tasmanian Road Safety Council', at <http://www.transport.tas.gov.au/safety/tasmanian_road_safety_council_trsc> [accessed September 2010]
[51] 'Members of RSTF' at <http://www.rstf.tas.gov.au/about_us/members_of_the_board> [accessed September 2010]
[52] Hogan and Sydes, transcript of evidence, 22 October 2008, p. 55
[53] Green and Nicholls, transcript of evidence, 17 June 2009, p. 10

into one body known as the Road Safety Advisory Council.[54] According to terms of reference posted on DIER's website:

> *The main function of the Road Safety Advisory Council is to provide strategic direction, oversight and critical assessment of proposed road safety initiatives and campaigns. RSAC will recommend and report to the Minister but will not deliver road safety initiatives directly – this will be done through existing Government Departments. However, government members are appointed, in part, for their ability to facilitate and expedite implementation of road safety initiatives*.[55]

Though names have not been announced, membership would comprise of:

- An independent chair;
- The heads of DIER, DPEM, MAIB and the Local Government Association of Tasmania;
- Representatives of road user organisations;
- A road safety expert; and
- A public education expert[56]

The Tasmanian Greens described the amalgamation as "*disappointing*" and called for the formation of a parliamentary committee to oversee road safety similar to arrangements in Victoria.[57] The Tasmanian Liberals did not criticise the fact a new body would be created, though were concerned a former Labor Minister might be appointed chair of the RSAC and give it a "*stench of cronyism*". The Liberals also claimed that "*one of the reasons the former RSTF was wound up appears to be that it had served its purpose as a Labor backbench promotional vehicle*." [58]

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[54] Tasmanian Government Media Release, 'New Road Safety Body Announced', 21 July 2010

[55] 'Tasmanian Road Safety Advisory Council Terms of Reference', at <http://www.transport.tas.gov.au/__data/assets/pdf_file/0020/51383/Terms_of_Reference_RSAC_Final_Draft.pdf> [accessed September 2010]

[56] 'Tasmanian Road Safety Advisory Council Terms of Reference', at <http://www.transport.tas.gov.au/__data/assets/pdf_file/0020/51383/Terms_of_Reference_RSAC_Final_Draft.pdf> [accessed September 2010]

[57] Tasmanian Greens Media Release, 'Road Safety Advisory Council a Missed Opportunity', 21 July 2010

[58] Tasmanian Liberals Media Release, 'Giddings Must Rule Out Appointing Labor Crony to Road Safety Body', 22 July 2010

Findings

The Committee found that –

1. The safe systems approach to road safety is appropriate for Tasmania.

2. The Government has changed its view in deciding to have one road safety body, as in evidence Mr Hogan and Mr Green defended the then-Government policy of having two separate entities.

3. There is an advantage in amalgamating the Road Safety Task Force and the Road Safety Council into the Road Safety Advisory Council, subject to the resources of the RSAC being not less than the total of the two previous bodies.

4. MAIB funding to the RSTF and revenue raised through the Road Safety Levy have been important factors in the promotion and support of road safety.

Recommendations

The Committee recommends that –

1. The MAIB be encouraged to continue their funding for road safety initiatives.

2. On the cessation of the Road Safety Levy in 2012, the State Government make available at least an equivalent amount (indexed) as raised through all traffic infringement penalties, including SCINs, for road safety.

3 Overview of Statistics and Data Collection

Tasmanian Road Crash Statistics

Upon request, DIER has provided the Committee with a range of statistical measures relating to road crash fatalities and serious injuries. In 2009 there were 64 road crash fatalities, an alarming 64 per cent increase on the previous year, and 287 road crash serious injuries in Tasmania.[59]

The following tables provide a year-by-year breakdown of fatalities and serious injuries in Tasmania since 2000.

Road Crash Fatalities and Serious Injuries, Tasmania, 2000-2009[60]		
	Fatalities	Serious Injuries
2000	43	526
2001	61	473
2002	37	424
2003	41	392
2004	58	380
2005	51	371
2006	55	317
2007	45	329
2008	40	281
2009	64	287
2010	As at 31 August: 22	As at 31 August: 184

Analysis shows that during the ten-year period 2000 to 2009 in Tasmania there was, on average, 49.5 fatalities and 388.6 serious injuries each year. Male road users are over-represented, accounting for around two-thirds of road crash fatalities and serious injuries in Tasmania from 2000 to 2009.[61] Among age groups, younger drivers (17 to 29) are shown to be the age group most at risk.

However, whilst in the 17 to 29 year age group fatalities and serious injuries have decreased compared to 2000 levels, over the same period the 30 to 49 year age group and the 50 to 64 year age groups have remained on a much straighter trendline.

The timing of serious injury and fatal crashes shows more were recorded on Saturdays than other days of the week and more were recorded in March than any other month. Broadly, more fatal and serious injury crashes were recorded over weekends and more during the summer months than during the winter.

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[59] DIER, 'Tasmanian Crash Statistics: Fatalities 2009' and 'Tasmanian Crash Statistics: Serious Injuries 2009', at <http://www.transport.tas.gov.au/safety/crash_statistics> [accessed September 2010]; DIER Annual Report 2008-09, pp. 30-32

[60] Information provided by Minister for Infrastructure, 21 July 2010. Figures for 2010 are sourced from <http://www.transport.tas.gov.au/safety/crash_statistics> [accessed September 2010]

[61] Information provided by Minister for Infrastructure, 21 July 2010

More drivers and passengers of light vehicles, statistically, were killed or injured in a road crash than other road users. This is, however, a bare measurement without taking into account differing levels of vulnerability and survivability between four-wheeled and two-wheeled modes of transport in the event of a crash.

When measured as rates, Tasmanian crash data shows that there were:

- 12.73 fatalities per 100,000 population in 2009, nearly double the national average of 6.9.

- 1.6 fatalities per 10,000 registered vehicles in 2009, above the national average of 0.96.

- 0.9 fatalities per 100 million vehicle kilometres in 2007 (more recent data unavailable) also above the national average of 0.74 in 2007.

More detailed tables relating to these fatality rates are provided later in this chapter.

Over the 2000 to 2009 period, Tasmanian road crash statistics show the following:[62]

- From 2000 to 2009, there were a total of 495 fatalities[63] and 3,886 serious injuries[64] on Tasmania's roads, an average per year of 49.5 fatalities and 388.6 serious injuries. From 1970 to 1979, by comparison, when road crash fatalities were at their highest levels, there was an average of 111.6 fatalities per annum in Tasmania.

- Males accounted for 2,788 serious casualties and females accounted for 1,427 serious casualties.[65]

- Fatalities and serious injuries by age group:[66]
    - 0 to 16: 40 fatalities and 392 serious injuries
    - 17 to 29: 164 fatalities (33.9%) and 1,375 serious injuries
    - 30 to 49: 148 fatalities (30%) and 1,086 serious injuries
    - 50 to 64: 72 fatalities and 457 serious injuries
    - Over 64: 71 fatalities and 412 serious injuries

- Fatalities and serious injuries by day of the week:

[62] Information provided by DIER, 17 March 2009; Information provided by Minister for Infrastructure, 21 July 2010

[63] Tasmanian authorities define a "fatality as being "where a person involved in the crash dies within 30 days of the crash." Information provided by Minister for Infrastructure, 21 July 2010

[64] Tasmanian authorities define a "serious injury" as being "where a person involved in the crash is admitted to hospital for 24 hours or more." Information provided by Minister for Infrastructure, 21 July 2010. The MAIB, however, defines a "serious injury" as being "one where the estimated costs are $2,000 indexed or more." MAIB, submission, p. 3

[65] Information provided by Minister for Infrastructure, 21 July 2010

[66] There were some cases where age was unknown.

  - Mondays: 35 fatalities and 426 serious injuries
  - Tuesdays: 52 fatalities and 386 serious injuries
  - Wednesdays: 58 fatalities and 492 serious injuries
  - Thursdays: 85 fatalities and 507 serious injuries
  - Fridays: 84 fatalities and 564 serious injuries
  - Saturdays: 102 fatalities and 742 serious injuries
  - Sundays: 79 fatalities and 601 serious injuries

- Fatalities and serious injuries by month:
  - January: 52 fatalities and 372 serious injuries
  - February: 49 fatalities and 387 serious injuries
  - March: 56 fatalities and 405 serious injuries
  - April: 45 fatalities and 315 serious injuries
  - May: 49 fatalities and 316 serious injuries
  - June: 46 fatalities and 273 serious injuries
  - July: 32 fatalities and 236 serious injuries
  - August: 27 fatalities and 247 serious injuries
  - September: 29 fatalities and 271 serious injuries
  - October: 24 fatalities and 255 serious injuries
  - November: 45 fatalities and 278 serious injuries
  - December: 43 fatalities and 427 serious injuries

- 285 fatalities occurred during daylight hours, 184 at night and 25 at dawn or dusk. 2,514 serious injuries occurred during daylight hours, 1,055 at night and 225 at dawn or dusk.

- Serious casualties by road user type:
  - 1,905 drivers
  - 1,003 passengers
  - 754 motorcycle riders
  - 402 pedestrians
  - 120 bicyclists
  - 38 ATV riders

- Inattention, speed, and alcohol (in that order) were the most commonly cited crash causal factors, as recorded by Police on the scene.

The following table shows that serious casualties have declined significantly in most categories over the period from 2000 to 2009, with the only exception being among motorcyclists where the decline has been less pronounced.

Serious Casualties by Road User Type, 2000-2009[67]										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Driver	251	223	241	208	196	190	149	169	139	139
Passenger	165	142	73	97	102	84	95	94	68	83
Pedestrian	56	53	53	38	44	44	30	27	26	31
M/cycle rider	77	95	79	73	75	76	76	65	65	74
M/cycle pillion	1	2	2	2	1	4	4	1	3	2
ATV rider	0	0	1	0	1	4	4	11	7	10
ATV passenger	0	0	0	0	0	1	0	0	0	1
Bicyclist	12	15	8	13	15	17	12	7	8	13
Other or unknown	7	4	4	2	4	3	2	0	0	0
Totals	569	534	461	433	438	422	372	374	316	353

Serious Casualties by Age Group and Sex, 2000-2009[68]										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Female										
<17	26	26	14	8	12	17	16	18	7	11
17-29	66	49	52	46	43	44	42	38	29	36
30-49	49	45	50	40	47	44	31	28	38	25
50-64	24	23	24	17	21	19	18	19	13	18
64>	28	32	16	27	37	19	20	13	23	19
Male										
<17	51	37	23	31	24	33	19	23	14	21
17-29	145	133	117	113	114	92	102	93	87	95
30-49	98	103	93	78	86	99	81	85	56	61
50-64	45	37	46	27	25	27	25	32	30	40
64>	26	35	20	38	22	25	17	22	15	27
Unknown	11	14	6	8	7	3	1	3	4	0
Totals	569	534	461	433	438	422	372	374	316	353

[67] Information provided by Minister for Infrastructure, 21 July 2010
[68] Information provided by Minister for Infrastructure, 21 July 2010

Serious Casualties by Crash Type, 2000-2009[69]										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Multi-vehicle										
From adjacent directions	44	36	26	41	35	31	21	24	22	19
From opposing direction	95	109	88	90	77	63	94	74	58	63
From same direction	35	37	27	22	25	18	18	9	18	12
Overtaking	5	3	11	5	19	27	11	23	4	15
Manoeuvring	18	27	19	13	16	20	18	29	28	31
Passenger and Miscellaneous										
Pedestrian	55	49	54	35	43	42	32	26	26	31
Passenger and misc	25	19	12	14	7	14	5	3	2	3
Single vehicle										
Off-path	265	234	204	198	207	198	162	177	150	172
On-path	27	20	20	15	9	9	11	9	8	7
Total	569	534	461	433	438	422	372	374	316	353

High-Risk Road User Groups, 2000-2009[70]		
User Group	Number of Serious Casualties	Percentage of Serious Casualties
16-25 year olds	1,339	31.3
Motorcyclists	776	18.2
66+ year olds	481	11.3
Pedestrians	402	9.4
Children (0-15)	324	7.6
Bicyclists	120	2.8
Heavy vehicle drivers	80	1.9

[69] Information provided by Minister for Infrastructure, 21 July 2010

[70] Information provided by Minister for Infrastructure, 21 July 2010. It was noted that "numbers cannot be added to give total number of serious casualties as groups may overlap"

Collecting Road Crash Statistics

When crashes occur in Tasmania, data is collected at the scene by police officers attending, which is subsequently transferred to DIER and then entered into a database known as the Crash Data Manager (CDM).

In its submission, DIER outlined the process of crash data collection in Tasmania:

> *"The Tasmanian crash data is created by a Crash Data Manager (CDM); a database that stores information from Traffic Crash Report Forms. When police officers attend a crash scene, or a crash is reported to police by the party involved, a Traffic Crash Report Form is completed and forwarded to DIER for statistical collation. In DIER, the Traffic Crash Report Form is sent to [the] Land Transport Safety Policy Branch, where information is entered into the CDM. The data can easily be accessed by staff and analysed, to allow the identification of crash problem areas."*[71]

A sample of the traffic crash report form compiled by Police at crash scenes and transferred to DIER is shown at Appendix 1.

Mr Blair Turner (Senior Research Scientist, ARRB Group) said Tasmania has *"one of the best"* crash data collection systems in Australia that is capable of producing quality information to a level not reached by other States.[72] Dr Jeremy Woolley (Senior Research Fellow, Centre for Automotive Safety Research (CASR)) told the Committee one of the distinct advantages of Tasmania's data collection system is that *"records get sent directly to DIER"* enabling the Department to maintain quality control over the data.[73] He explained:

> *"What happens in many of the other States is that the police conduct the data entry and their own quality control and then release a version of that database to the road authorities who then value-add to it with their own variables, be they engineering things or things they need to maintain their own road networks."*[74]

He added:

> *"The other thing which is quite effective in Tasmania is that you have a spatial database which has been set up which means that you can produce maps of where the crashes are occurring and obtain your intelligence that way."*[75]

[71] DIER, submission, p. 2
[72] Cairney *et al*, transcript of discussion, 28 January 2009, pp. 11-12
[73] Anderson *et al*, transcript of discussion, 30 January 2009, p. 4
[74] Anderson *et al*, transcript of discussion, 30 January 2009, p. 4
[75] Anderson *et al*, transcript of discussion, 30 January 2009, p. 4

In terms of data coverage and availability, the fields and range of data collected in Tasmania are summarised below:

- Crash severity (ranging from fatal to minor injury);
- Crash time and date (time of day, time of week, month);
- Status of the road edge and road surface;
- Visibility and lighting (clear, foggy, rainy, darkness, dawn or dusk);
- Speed zone;
- Crash factor (22 different factors);
- Type of crash (head-on, intersection, overtaking, and 25 other subcategories);
- Police district and details of officers attending scene;
- Type of vehicle (car, bus, truck, motorcycle, and numerous specialty vehicles);
- Vehicle particulars (model, make, colour);
- Road user type;
- Driver licence details and drivers particulars; and
- Blood and breath test result.[76]

Data Limitations

Ms Angela Conway (Manager, Land Transport Safety Policy, DIER) said that the range of data recorded for each crash is deliberately limited as the volume of work involved – *"400 or so serious crashes and thousands of other types of crashes"* – would otherwise be too time consuming.[77]

The Committee found limitations with data relating to serious injuries. According to information provided by DIER, Tasmania defines serious injury as being *"where a person involved in the crash is admitted to hospital for 24 hours or more."*[78] The MAIB, by contrast, defines a *"serious injury"* as being *"one where the estimated costs are $2,000 indexed or more."*[79] Significantly, DIER's definition measures a serious injury in terms of time hospitalised rather than in terms of severity *per se*. Furthermore, the data does not distinguish cases of mendable bone breakages from injuries resulting in catastrophic disability. Mr James Harrison, the Director of the Adelaide-based Research Centre for Injury Studies (RCIS) said that the term 'serious injury' is ambiguous, because some

[76] Information provided by DIER, 17 March 2009
[77] Todd *et al*, transcript of evidence, 14 October 2009, p. 16
[78] Information provided by DIER, 17 March 2009
[79] MAIB, submission, p. 3

injured patients will recover to their pre-crash health (or close to) whereas other victims will bear health problems over the long-term and never recover. He said:

> *"The statistics that we have at the moment – and it is not just us but worldwide – on hospital morbidity, are not really very good at letting us sieve the total cases, all the ones hospitalised, into a group that will almost completely get better – it might take them a few months but they will be pretty much as good as new after a few months – versus the ones left with this sort of persisting serious disability."*[80]

Mr Harrison commented that methods are being developed to improve serious injury data:

> *"Certainly something that we have been using increasingly in this work is stratifying the cases by severity as best we can with the data available. In some ways the hospitals can provide different information if you do that. … The methods that we have been using here are almost a weigh station towards being able to do that sort of split that we are talking about. They are a method that has been shown to be valid in terms of predicting probability of survival with the different sorts of injuries."*[81]

He added that comparing serious injuries across Australian jurisdictions is not possible because States collect data differently and hospital admission criteria vary, meaning the same injury could lead to an admission in one place and avoiding hospital in another.[82] Similarly, for reasons of incompatible or unavailable data, DIER had difficulty with the Committee's requests for serious injury data comparing Tasmania with other Australian jurisdictions.

Associate Professor Michael Buist (Rural Clinical School, UTAS) called for Tasmania to establish a traffic fatality registry, based on the model of the Victorian State Trauma Registry.[83] A registry would contain data relating to a patient's care pre-hospital, during transfer to hospital and in-hospital, which can be traced through a retrospective audit process to measure morbidity and mortality outcomes. Managers, policymakers and coroners can then, as A/Prof Buist described, "*interrogate the system*".[84] An editorial in the *Medical Journal of Australia*, to which A/Prof Buist referred in his evidence, has commented:

> "*Panel studies (involving multidisciplinary peer-group evaluation of patient management), trauma registry data and population-based research indicate that mortality and morbidity are reduced following the introduction of integrated trauma systems and that continuing improvements can be achieved*."[85]

Individual cases could be examined to see where patients have died from latent injuries not promptly detected. "*I am looking at it from a patient point of view, as opposed to an accident point of view*," A/Prof Buist said.[86]

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[80] Harrison, transcript of discussion, 30 January 2009, p. 8
[81] Harrison, transcript of discussion, 30 January 2009, pp. 8-9
[82] Harrison, transcript of discussion, 30 January 2009, p. 9
[83] Buist, transcript of evidence, 25 May 2010, p. 1
[84] Buist, transcript of evidence, 25 May 2010, p. 3
[85] *Medical Journal of Australia*, editorial, vol. 189 no. 10, November 2008
[86] Buist, transcript of evidence, 25 May 2010, p. 4

National and International Comparisons

The following section compares road death statistics for Tasmania against other Australian States and selected OECD jurisdictions, in terms of fatalities per capita, as a proportion of registered vehicles and distance travelled. It also allows for a broad comparison of data across the developed world. Globally, according to the World Health Organisation:

> *"Road traffic injuries are a major but neglected global public health problem… Of all the systems that people have to deal with on a daily basis, road transport is the most complex and the most dangerous. Worldwide, the number of people killed in road traffic crashes each year is estimated at almost 1.2 million, while the number injured could be as high as 50 million – the combined population of five of the world's large cities."*[87]

Data on national and international road crash fatalities, shown below, has been sourced from two Department of Infrastructure reports: *Road Deaths Australia: 2009 Statistical Summary*, and *International Road Safety Comparisons: The 2007 Report*. A comparison of serious injuries data is not possible due to variations in the way data is collected and classified in each jurisdiction.[88]

In summary, the national statistics show:

- Tasmania has the second-highest per capita rate of road crash deaths and the second-highest rate per 100 million vehicle kilometres travelled and the second highest rate per ten thousand registered vehicles.

- The Northern Territory has historically recorded the highest road crash death rates and the Australian Capital Territory has historically recorded the lowest crash death rates.

The first group of tables compares Australian jurisdictions.

Road Crash Death Rates by State/Territory (per 100,000 population)[89]

The number of road deaths for every 100,000 population is a measure of the public health risk associated with road trauma.

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Australia
1975	26.12	24.03	30.96	26.79	26.32	29.75	68.91	16.08	26.59
1985	19.53	16.58	19.52	19.54	17.13	17.61	45.11	13.13	18.63
1995	10.12	9.25	13.97	12.32	12.05	12.03	34.36	4.92	11.16
2005	7.52	6.85	8.26	9.53	8.08	10.49	26.65	7.87	7.98

[87] World Bank/World Health Organisation, *World Report on Road Traffic Injury Prevention* (WHO, Geneva, 2004), p. 3

[88] Todd *et al*, transcript of evidence, 14 October 2008, p. 15

[89] *Road Deaths Australia: 2009 Statistical Summary* (Department of Infrastructure, Transport, Regional Development and Local Government, Canberra, 2010), p. 23; Dept of Infrastructure, Transport, Regional Development and Local Government, *Road Deaths Australia*, December 2009, p. 10

2006	7.28	6.57	8.19	7.46	9.86	11.23	19.94	3.89	7.72
2007	6.32	6.40	8.61	7.83	11.16	9.12	26.99	4.12	7.62
2008	5.70	5.72	7.64	6.18	9.66	8.03	34.10	4.07	6.85
2009	6.49	5.44	7.49	7.33	8.81	12.73	13.79	3.42	6.90

Road Crash Death Rates by State/Territory (per 100 million vehicle km travelled)[90]

The number of deaths for every 100 million vehicle kilometres travelled is a direct measure of the risk associated with road travel.

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Australia
1975	3.8	3.3	4.3	3.5	3.2	4.4	10.0	2.0	3.8
1985	2.33	1.78	2.21	2.19	1.73	1.99	5.40	1.63	2.09
1995	1.27	0.97	1.32	1.33	1.18	1.32	4.23	0.50	1.21
2005	0.80	0.67	0.74	1.02	0.75	0.96	3.43	0.84	0.79
2006	0.81	0.62	0.74	0.75	0.90	1.09	2.79	0.43	0.77
2007	0.69	0.57	0.78	0.87	0.97	0.90	3.25	0.44	0.74
2008	0.55	0.53	0.68	0.61	0.85	0.74	3.79	0.39	0.64
2009	0.68	0.51	0.69	0.74	0.80	1.21	1.57	0.34	0.67

Road Crash Death Rates by State/Territory (per 10,000 registered vehicles)[91]

The number of deaths for every 10,000 registered vehicles is a means of comparing road death levels among jurisdictions by taking into account their different levels of motorisation.

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Australia
1980	5.17	3.35	4.43	3.80	3.93	4.36	13.40	2.84	4.32
1985	3.57	2.80	3.25	3.28	2.81	2.93	9.33	2.58	3.23
1995	1.86	1.46	2.27	1.88	1.78	1.78	6.75	0.82	1.84
2005	1.22	0.95	1.19	1.33	1.07	1.41	5.01	1.18	1.17
2006	1.16	0.90	1.16	1.03	1.27	1.47	4.03	0.58	1.12
2007	1.00	0.87	1.19	1.07	1.40	1.18	4.91	0.60	1.08
2008	0.88	0.77	1.03	0.84	1.20	1.02	6.10	0.58	0.96
2009	1.01	0.74	1.01	0.98	1.08	1.60	2.41	0.49	0.96

This second group of tables compares Tasmania with selected overseas jurisdictions. Internationally, a road crash fatality is defined as *"a person who was killed outright or who died within 30 days as a result of the accident"*, which is basically the same as the definition applied in Tasmania and other parts of Australia.[92]

Though not listed in extensive detail herein, in 2007 statistics show (data for 2008 and 2009 is yet to be made available) that internationally:

[90] *Road Deaths Australia: 2009 Statistical Summary* (Department of Infrastructure, Transport, Regional Development and Local Government, Canberra, 2010), p. 23

[91] *Road Deaths Australia: 2009 Statistical Summary* (Department of Infrastructure, Transport, Regional Development and Local Government, Canberra, 2010), p. 30, p. 20; Dept of Infrastructure, Transport, Regional Development and Local Government, *Road Deaths Australia*, December 2009, p. 10

[92] *International Road Safety Comparisons: The 2007 Report* (Department of Infrastructure, Transport, Regional Development and Local Government, Canberra, 2009), p. 1

- The Netherlands had the lowest crash fatality rate **per 100,000 population** (4.3) and Poland the highest (14.7). Tasmania (9.1), if counted among OECD members, would rank nineteenth among 29 countries supplying data.

- Iceland had the lowest rate **per 100 million vehicle kilometres** travelled (0.5) and Belgium the highest (1.1). Tasmania (0.9) would rank equal eleventh place among 15 countries supplying data.

- Iceland had the lowest rate **per 10,000 registered vehicles** (0.6) and Hungary the highest (3.5). Tasmania (1.2) would rank equal twelfth place among the 23 countries supplying data.

Tables below compare road safety performance among selected OECD member countries. Tasmanian data has also been included.

Road Crash Death Rates, OECD/Tasmania/Australia (per 100,000 population)[93]

	Aust.	Can.	UK	Neth.	NZ	Swe.	USA	OECD Median	Tasmania
1975	26.6	26.7	11.6	17.1	20.0	14.3	20.7	18.6	29.7
1985	18.6	17.3	9.4	9.9	22.6	9.7	18.4	15.1	17.6
1995	11.2	11.4	6.4	8.6	15.9	6.5	15.9	12.3	12.0
2005	8.0	9.1	5.5	4.6	9.9	4.9	14.6	9.3	10.5
2006	7.7	9.1	5.4	4.5	9.4	4.9	14.2	8.8	11.2
2007	7.6	-	5.0	4.3	10.0	5.2	13.6	7.8	9.1

Road Crash Death Rates, OECD/Tasmania/Australia (per 100 million vehicle km travelled)[94]

	Aust.	Can.	UK	Neth.	NZ	Swe.	USA	OECD Median	Tasmania
1975	3.8	-	2.7	3.5	-	2.7	2.1	3.6	4.4
1985	2.1	-	1.7	1.8	-	1.5	1.5	2.1	2.0
1995	1.2	-	0.8	1.2	-	0.9	1.1	1.4	1.3
2005	0.8	0.9	0.6	-	-	0.6	0.9	0.9	1.0
2006	0.8	0.9	0.6	-	1.0	0.6	-	0.9	1.1
2007	0.7	-	0.6	-	1.1	0.6	0.9	0.7[95]	0.9

Road Crash Death Rates, OECD/Tasmania/Australia (per 10,000 registered vehicles)[96]

	Aust.	Can.	UK	Neth.	NZ	Swe.	USA	OECD Median	Tasmania
1975	5.8	5.3	3.8	6.3	4.3	3.8	3.2	7.2	6.2
1985	3.2	3.0	2.5	2.8	3.9	2.2	2.6	3.5	2.9

[93] *International Road Safety Comparisons: The 2007 Report* (Department of Infrastructure, Transport, Regional Development and Local Government, Canberra, 2009), p. 5

[94] *International Road Safety Comparisons: The 2007 Report* (Department of Infrastructure, Transport, Regional Development and Local Government, Canberra, 2009), p. 10

[95] For 2007, data for 15 of 30 OECD member states is not available.

[96] *International Road Safety Comparisons: The 2007 Report* (Department of Infrastructure, Transport, Regional Development and Local Government, Canberra, 2009), p. 6

1995	1.8	2.0	1.4	2.0	2.5	1.3	2.1	2.5	1.8
2005	1.2	1.5	1.0	0.9	1.3	0.9	1.8	1.5	1.4
2006	1.1	1.5	1.0	0.8	1.3	0.9	-	1.4	1.5
2007	1.1	-	0.9	0.8	1.3	0.9	-	1.2	1.2

The Cost of Road Crashes

Road crashes incur a human and financial cost. The former in particular is not quantifiable, except to say it is of course significant and wide reaching. In financial terms, the Bureau of Transport Economics has estimated that the cost of road crashes in Australia amounts to billions of dollars each year, mainly as a result of property damage, lost productivity and patient care. The report estimated the financial cost of a road crash per fatality to be (in 1996 dollars), an average of $1.5 million per annum; a serious injury to be an annual average of $325,000; and a minor injury to be an average per annum of $12,000.[97]

The report also contained an estimate of specific aspects of road trauma cost, as shown below, which the Committee has converted into 2009 dollars.

Road Crash Component Financial Costs, Australia, 2009 dollars[98]	
Component	Cost ($ million)
Vehicle Repairs	5,374 (27%)
Lost Labour	4,346 (21%)
Long-Term Care	2,774 (13%)
Travel Delays	2,014 (10%)
Quality of Life	2,466 (12%)
Insurance Administration	1,291 (6%)
Legal	1,113 (4.5%)
Medical	503 (2.5%)
Workplace Disruption	436 (2%)
Unavailability of Vehicles	254 (1%)
Other	248 (1%)
TOTAL	20.840

The report also noted:

> *"Crash costing is an inexact science. Cost estimates depend on particular costing approaches used, the number of crash cost components that can be estimated, quality and quantity of available data and the value of key parameters (such as the discount rate) used. An important influence on the*

[97] BITRE, *Road Crash Costs in Australia* (Bureau of Transport Economics, Canberra, 2000), Report 102, p. xii

[98] BITRE, *Road Crash Costs in Australia* (Bureau of Transport Economics, Canberra, 2000), Report 102, pp. 82-83. This report showed the same figures in 1996 dollars, which have been converted into CPI-adjusted 2009 dollars. (Source: ABS Publication No. 6401.0 – Consumer Price Index, Australia, Jun 2009)

overall cost is the use of the human capital or willingness to pay approach to value life and injury."[99]

The 'Tasmanian Road Safety Strategy 2007-2016' estimates that the cost of road crashes to the State is *"on average nearly $500 million a year."*[100] The Strategy also estimates:

> *"The cost of an 18-year-old male with acquired brain injury as a result of [a] road crash will be $12 million in care, support, and medical fees over his lifetime."*[101]

Mr Sam Cawthorn told the Committee of the personal impacts of having been involved in a crash:

> *"Where do I begin? I could write out a list. Everything from I used to dance, I used to play guitar, I used to be a musician. I cannot do any of that now. I have got three kids under the age of six; just holding them up and everything like that. It is hard. Sitting in a normal chair – the reason why I am slouched down is because my leg does not bend at all, it is physically straight. Sitting in a car, in a plane, in a theatre – very hard."*[102]

In evidence, Ms Robin Ikin and Mr Graeme Lunson (Road Trauma Support Team Tasmania Inc), who provide counselling services to people affected directly and indirectly by road crashes, outlined the emotional and psychological cost of crashes and the extent of this cost. Ms Ikin said:

> *"It's often just assumed once the body is knitting together okay that the person is going home and that they'll be alright. People with close families and good social network support tend to do better than people who don't have those supports but even so sometimes people can suffer from post-traumatic stress disorder. … You leave the house, you say goodbye to everyone, you get in your car and off you go, never expecting anything shocking to happen to you. By the end of the day you could be dead, you could be in intensive care, you could have your whole life wrecked; your health wrecked."*[103]

Mr Lunson observed that the lives of 30 to 40 people could be affected to varying degrees as a result of a road crash.[104]

Some witnesses drew to the Committee's attention the level of workload created for hospital services following road crashes.

Dr Gary Fettke (Launceston General Hospital) described the effect on hospital services of off-road motorcycle crashes:

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[99] BITRE, *Road Crash Costs in Australia* (Bureau of Transport Economics, Canberra, 2000), Report 102, p. xii

[100] DIER, 'Tasmanian Road Safety Strategy 2007-2016', June 2007, p. 5

[101] DIER, 'Tasmanian Road Safety Strategy 2007-2016', June 2007, p. 5

[102] Cawthorn, transcript of evidence, 25 March 2009, p. 87

[103] Lunson and Ikin, transcript of evidence, 25 March 2009, p. 31

[104] Lunson and Ikin, transcript of evidence, 25 March 2009, pp. 32-33

> *"We have a significant and increasing trauma load associated with off-road motor vehicle accidents and predominantly two-wheel drives. Anything that can be done to decrease the amount of trauma associated with that will have a beneficial effect on our trauma departments, particularly at weekends. When we talk about the cost of motorbike injuries, there is a direct cost to the patient in suffering from their injuries and to the community… . There is another cost which is operating time in theatre. First, we utilise that time. Second, these patients often require multiple operations and returns to theatre, and they require operations to be done right there and then. That means displacing patients from the waiting list. … Each week we get someone after a motor vehicle accident who requires further surgery that requires displacement of patients who are in pain on a waiting list."*[105]

Mr James Harrison (Director, RCIS) said that survivable injuries such as brain injury and spinal cord injury are most concerning because *"people are really not the same afterwards and will never get better or will get somewhat better but are left with a persisting disability of some sort."*[106]

Crash Causes

Investigating and identifying crash causes is a complex task. The Committee was presented with various views seeking to explain the causes of road crashes and the factors that increase crash risk or injury risk. There was a degree of tension apparent between points of view emphasising the actions of drivers as being responsible for road crashes and points of view emphasising the role of the road environment and the road system.

A report conducted by MUARC has considered the conceptual and theoretical aspects of human error and road transport. Its report noted that there have been *"numerous attempts at defining the construct of human error, but no universally accepted definition exists."*[107] Nevertheless, the report identified several typologies of human errors applicable to the context of road transport.

- Slips – an appropriate intention (such as to brake for a sharp corner) is followed by incorrect physical execution of the intention (such as to engage the accelerator instead).

- Lapses – an intention exists to execute an action (such as the use of indicators) though a person forgets to carry it out or cannot recall the sequence of actions required.

- Mistakes – a wrong decision is taken, either in principle or at the wrong time (such as to increase rather than decrease speed), which is followed through with the correct execution.

[105] Fettke, transcript of evidence, 25 March 2009, p. 26
[106] Harrison, transcript of discussion, 30 January 2009, p. 8
[107] Salmon, Paul, *et al*, *Human Error and Road Transport: Phase One – Literature Review* (MUARC, Clayton, 2005), Report 256, p. xv

- Violations – behaviour or actions, deliberate or unintentional, which violate rules and procedures. These violations could be relatively minor and pose an insignificant safety risk, whereas others could be brazen and pose a high safety risk.

- Latent errors – dormant failures that arise at a later stage of operation, such as those related to standards of maintenance or organisation.

- Programming errors – problems and failures relating to control systems (such as a traffic light malfunction).[108]

Further, in reviewing research and literature on human errors, MUARC's report identified two distinct theoretical positions for explaining how errors arise, namely the person approach and the systems perspective approach. Evidence presented to this Committee pertaining to why road crashes occur essentially reflected these two theoretical positions, with some witnesses and submissions emphasising driver fault and others emphasising the role of the road environment.

The person approach focuses on operator fault and aims to identify and remedy the psychological traits leading to errors:

> *"When using the person approach, human error is treated as the cause of most accidents; the systems in which people work are assumed to be safe; human unreliability is seen as the main threat to system safety; and safety progress is achieved by protecting systems from human unreliability through automation, training, discipline, selection and proceduralisation."*[109]

For example, the submission provided by Driver Safety Services stated, *"95 per cent of crashes are caused by driver error".* [110] The submission added:

> *"Most crashes (not accidents) are caused by drivers making a mistake usually by: inattention; not allowing crash avoidance space; [and] excessive speed for the conditions (not necessarily exceeding the speed limit)."*[111]

The late Mr John Youl expressed a similar view:

> *"The single most common fault is that most drivers don't expect something untoward or dangerous to happen and are therefore not ready or able to react in the right way and or quickly enough to avoid the problem, more than likely resulting in a crash of some sort."*[112]

Mr Barry Oliver (Advanced Driving Techniques) expressed the following view:

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[108] Salmon, Paul, *et al*, *Human Error and Road Transport: Phase One – Literature Review* (MUARC, Clayton, 2005), Report 256, pp. 6-11. More extensive detail is contained in the report.
[109] Salmon, Paul, *et al*, *Human Error and Road Transport: Phase One – Literature Review* (MUARC, Clayton, 2005), Report 256, p. xvi
[110] Driver Safety Services, submission, pp. 2-3
[111] Driver Safety Services, submission, pp. 2-3
[112] Youl, submission, p. 1

> *"It is time we stopped externalising the problem and accept the fact that the overwhelming majority of the crashes were the fault of the driver."*[113]

On the other hand, the systems perspective approach focuses on systemic failures, such as sub-standard design and equipment, rather than operator deficiencies as creating the conditions for crashes, according to MUARC's report:

> *"Therefore… human error is treated as a symptom of problems within the system, it is assumed that safety is not inherent within systems, and that human error is linked to the tools used, tasks performed and operating environment."*[114]

Mr Nigel Beeke, for example, told the Committee:

> *Any safety system that relies on human behaviour is doomed to fail. … The problem is that if you emphasise and push for some huge change in human behaviour it won't work because humans make mistakes. … Each day in Tasmania tens of thousands of vehicles pass within one to two metres of disaster separated by a strip of paint. Accidents will happen."*[115]

Mr Peter Mackenzie said:

> *"There is an imbalanced focus on the main factors of alcohol, speeding, fatigue, and inattention, without enough critical examination of other factors and how they interact to work against road safety."*[116]

Aside from the theoretical debates about why road crashes occur, the Committee has had access to quantitative data pertaining to crash factors, which is collated by DIER based on police reports of the event.

The Department of Police and Emergency Management (DPEM) submitted that the *"factors most regularly identified"* as causing crashes in Tasmania are speed, alcohol and drugs, and inattention. *"Very little variation in crash causal factors is identified from year to year,"* the submission stated.[117] Sgt Michael Davis (Tasmania Police Northern District Accident Investigation Section) – who noted that he has attended *"more than 200 fatal crashes and in excess of 250 serious injury crashes"*[118] – told the Committee:

> *"I can go right back to 1985 with every fatal crash that has been recorded since then and you will find that alcohol, speed, failure to wear a seatbelt, negligent or dangerous driving is a factor in a lot of those crashes…"*[119]

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[113] B. Oliver, transcript of evidence, 22 October 2008, p. 74
[114] Salmon, Paul, *et al*, *Human Error and Road Transport: Phase One – Literature Review* (MUARC, Clayton, 2005), Report 256, p. xvii
[115] Beeke, transcript of evidence, 21 October 2009, p. 2
[116] Mackenzie, submission, p. 7
[117] DPEM, submission, p. 1
[118] Davis, transcript of evidence, 7 May 2009, p. 11
[119] Davis, transcript of evidence, 7 May 2009, p. 19

Crash factor data for Tasmanian for the period 2000 to 2009 is presented in the table below.

Serious Casualties by Crash Factors, 2000-2009[120]										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total Serious Casualties in Each Year	569	534	461	433	438	422	372	374	317	353
Crash Factors										
Alcohol	93	89	73	63	105	87	88	86	93	91
Animal on road	11	4	14	8	1	4	4	8	8	4
Asleep or fatigue	21	17	19	18	16	25	30	43	15	24
Distraction – external to vehicle	1	8	6	7	9	19	17	32	29	34
Distraction – in vehicle	7	5	3	4	10	14	17	12	13	12
Drugs	0	17	7	15	9	32	38	60	52	54
Exceeding speed limit	5	4	9	13	22	49	65	45	58	53
Excessive speed for conditions	130	98	86	89	103	111	110	73	73	80
Fail to give way	41	30	24	34	23	19	28	25	36	31
Fail to obey traffic signals	5	4	10	8	2	3	6	5	7	2
Fail to observe markings and signage	52	50	47	40	55	31	12	10	19	22
Improper overtaking	7	8	8	13	15	17	8	21	7	22
Inattentiveness	128	138	150	127	175	185	144	147	163	167
Inexperience	56	48	44	46	58	76	97	107	93	126
Other	186	159	118	117	0	0	0	0	0	0
Obstruction on road	6	0	6	6	5	6	8	12	5	12
Pedestrian on road	59	43	40	27	42	35	21	21	19	27
Reversing without care	3	9	7	7	2	5	4	4	5	3
Road defect	8	17	13	22	21	22	29	18	22	20
Turning without care	16	16	2	6	10	7	15	12	19	22
Unwell or infirm	20	10	9	16	28	26	37	31	40	41
Using mobile phone	0	0	0	0	0	2	2	3	1	1
Vehicle defect	15	11	16	23	33	26	21	43	34	53

[120] DIER Annual Report 2008-09, p. 32

Notwithstanding the evidence of Sgt Davis (based on his extensive experience in the field and being confirmed by the above data), the Committee found that the data collection process relating to crash factors to be subjective and lacking in robustness.

In particular the above data is affected by differing input methods. Prior to July 2005 any two factors could be attributed to one crash, whereas post-2005 this limit was removed, such that *"more than one"* could be associated with each crash.[121] Consequently, when crash factor data in 2000 is compared with data in 2009, the trends appear implausible.

Further, Traffic Crash Report forms do not provide for police to indicate that the causes were unknown or impractical to identify and it is unclear how factors are ruled in or ruled out, as the crash report forms ask simply: *"in your opinion, which of the following factors contributed to the crash?"*[122] Ms Angela Conway (DIER) said although it is *"a similar process that other jurisdictions use"*,[123] Police make determinations of crash factors based on judgment:

> *"At the roadside, as you would appreciate, the police are coming there to an emergency situation often. They probably deal with the situation and talk to witnesses and then fill out this crash form that is provided to the department. When they do that they do not apportion weightings to factors that contributed to the crash. All they do is say, yes, they believe excessive speed played a part and they believe the driver was inexperienced and there are a number of different boxes that they can tick. I suppose it is a subjective process. They have to use their best judgment at the roadside often at the time and from that, that is the data that we then enter into the database and use."*[124]

Crash factor data is probably also affected by the use of vague terminology. Inattentiveness, for example, is the most frequently attributed crash factor. However, factors closely related to inattention, including distractions (in-vehicle or external) and use of a mobile phone, are only being cited in low proportions in comparison. The expected consequences of inattention – failing to give way or turning without care for example – are also cited in low proportions, despite the fact that Police are able to record multiple factors against each crash.

Leaving aside such shortcomings, the Committee accepts the demonstrable face value results of the crash factor data, which shows that relative to other factors, alcohol, speed and inattention are most frequently recorded.

Sgt Michael Davis explained to the Committee the general processes and practices employed to investigate serious casualty crashes:

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[121] According to the DIER's 2008-09 Annual Report: "In July 2005 data was migrated from the old Traffic Accident Database and mapped into the Crash Data Manager. More than one crash factor may be associated with a serious casualty. Prior to July 2005 up to two factors were associated with a serious casualty." DIER Annual Report 2008-09, p. 32.

[122] Traffic Crash Report form as provided by DIER, 17 March 2009

[123] Todd *et al*, transcript of evidence, 14 October 2009, p. 16

[124] Todd *et al*, transcript of evidence, 14 October 2009, p. 16

> *"If there is a report of a fatal crash we are notified; that could be within 10 minutes to 15 minutes. … We have a response time of 20 minutes when you are on call. The scene has to be secured for the preservation of evidence. We cover the whole 63 district so we could have anything up to an hour-and-a-half travel time to get to that crash scene. Nothing is allowed to be touched until we get there. We could spend anything from two to six hours depending on the nature of the fatal crash at the scene. … Once we have completed our investigation at the scene we would then return to the office. There would be probably another two hours of paper work that we submit and then the investigation would take place."*[125]

Sgt Davis indicated to the Committee that in the event of a single vehicle fatal crash in a rural area, the Accident Investigation Section (AIS) *"do not get called out unless we are so directed."*[126] Sgt Davis also observed that with officers in country areas having other duties, *"it may take him anything up to six months*" to prepare a report, whereas the accident investigation section can complete this process *"within probably six to eight weeks"*.[127]

Mr Barry McDonald (collision analyst and recontructionist) told the Committee that due to a shortage of competent accident investigators at Tasmania Police, people will *"get away with"* offences because *"there is not professional data presented to the courts."*[128] He submitted:

> *"To ensure that guilty drivers are brought to justice requires that police competently investigate all collisions and are able to provide the courts with professional evidence of how the collision occurred. … Without skilled collision investigators some offenders will not be brought to account, justice will not be served and the public will be deprived of what should be a vital deterrent in the fight to save all our lives on our roads."*[129]

The Committee asked Sgt Davis what level of training officers in country areas would have. He said:

> *"They would probably get a two-hour training session from us that we would deliver to them. They would then get a guideline procedure of how to investigate it, which I prepared myself, but they are on their own devices."*[130]

The Committee asked whether he believed this is adequate. He replied:

> *"My own personal view is that it is not. I am quite happy to go to single vehicle crashes and assist but policy states that we don't."*[131]

The Committee also asked Sgt Davis whether pressure is placed on crash investigators to work quickly to allow the re-opening of a road as early as possible. Sgt Davis said:

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[125] Davis, transcript of evidence, 7 May 2009, p. 17
[126] Davis, transcript of evidence, 7 May 2009, p. 12
[127] Davis, transcript of evidence, 7 May 2009, p. 13
[128] McDonald, transcript of evidence, 15 October 2008, pp. 15-16
[129] McDonald, submission, pp. 2-3
[130] Davis, transcript of evidence, 7 May 2009, p. 14
[131] Davis, transcript of evidence, 7 May 2009, p. 14

> *"If it is on a major highway we are under extreme pressure at times. On occasions I do not think they appreciate the work that we have to do."*[132]

The Committee asked to whom he was referring. He said:

> *"Our administrators. There has to be a crash-scene manager and that is usually the inspector that attends the scene. We are under the pump to keep the traffic moving."*[133]

Suicides

Witnesses stated that in some cases road crashes might in fact have been suicides or suicide attempts. Mr Nigel Beeke stated that in Australia, there are *"a lot of single vehicle accidents involving young males running off the road or specifically running into the front of large trucks"* intending to commit suicide.[134] Mr Barry McDonald said that there have been cases he has investigated where road crash events have plausibly been suicides, though he noted that suicide is *"very difficult to determine"* in the absence of positive evidence. *"These incidents do falsely increase the road toll,"* he told the Committee.[135]

A literature review on the subject conducted by MUARC found that, based on available research, "*between 1% and 7% of driver fatalities may be noted as possible suicides*".[136] Internationally, and in Tasmania, if determined as such, suicides and natural deaths are excluded from road crash statistics.[137] However, until this fact can be established, suspected suicides are presumed to be unintentional. The difficulties of establishing true intent and finding positive evidence means, as Mr McDonald testified, that suicides (and natural deaths) could inflate the road toll. MUARC also concluded that avoiding stigma and financial losses might be an "*imperative for concealing the intentional nature of the death*."[138]

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[132] Davis, transcript of evidence, 7 May 2009, p. 19
[133] Davis, transcript of evidence, 7 May 2009, p. 19
[134] Beeke, transcript of evidence, 21 October 2008, p. 12
[135] McDonald, transcript of evidence, 15 October 2008, p. 3
[136] Routley, Virginia, *et al*, 'Suicide and Natural Deaths in Road Traffic – Review', August 2003, MUARC Report No. 216, p. xi
[137] Routley, Virginia, *et al*, 'Suicide and Natural Deaths in Road Traffic – Review', August 2003, MUARC Report No. 216, p. xv
[138] Routley, Virginia, *et al*, 'Suicide and Natural Deaths in Road Traffic – Review', August 2003, MUARC Report No. 216, p. xvi

Findings

The Committee found that –

5. Data reveals males are significantly over-represented in serious casualty crashes in all age groups, but particularly in the 17 to 25 age group.

6. The number of serious casualties in Tasmania has seen an overall reduction since 2000.

7. In 2009, the number of fatalities was high compared to other years in the last decade.

8. The consequences of road crashes impose significant costs on the health system, as well as the physical, psychological, financial and human cost associated with crashes.

9. The main factors causing road crashes are inexperience, inattention excessive speed and alcohol.

10. The DPEM policy of not having qualified accident investigators attend every serious casualty crash, particularly in rural areas, and inadequate numbers of accident investigators is contributing to quality control problems and potentially inconsistent assessments of crash causes.

11. Suicide appears to be an under-recognised cause of fatal crashes, although it is often difficult to determine this fact.

12. Over the last decade, fewer serious casualty crashes have occurred during the months of July, August, September and October, and on Mondays, Tuesdays and Wednesdays.

13. Tasmania does not have a traffic fatality registry.

14. Since 2005, Tasmania has been above the national average in terms of road crash deaths per 100,000 population, per 10,000 registered vehicles and per 100 million vehicle kilometres travelled.

15. In relation to alcohol, speed, inattention and inexperience, there has been no abatement in the last ten years in the frequency of these factors being cited as contributing to crashes in Tasmania.

Recommendations

The Committee recommends that –

3. A national uniform standard of collecting serious injury data be developed and that the Minister for Infrastructure raise this issue at the Australian Transport Council.

4. Tasmania Police adopt a policy to ensure that all serious car crashes are attended, assessed and investigated by qualified accident investigators.

5. Adequate resources be made available for accident investigation to ensure sufficient qualified investigators are available to implement this policy.

6. A road trauma registry be developed for Tasmania.

7. Driver education and road safety strategies focus particularly on inexperience, inattention, alcohol and excessive speed.

4 Novice Drivers, Education, Training and Licensing

One of the strongest and most consistent themes throughout the evidence and submissions received by the Committee was the compelling need for a compulsory driver education course to be undertaken by all learner drivers. The Committee supports this proposition in principle.

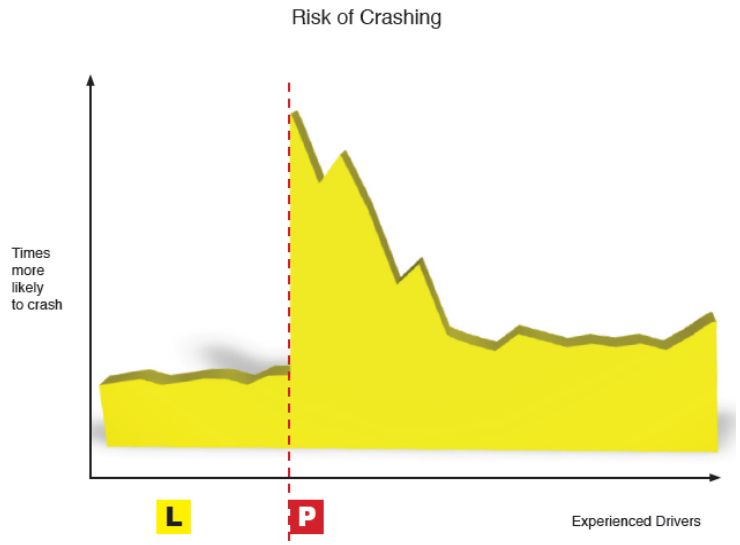
In its *Interim Report* the Committee recommended that road safety and driver awareness be part of the curriculum in all Tasmanian schools beginning at primary school and that all learner drivers be required to participate in a compulsory driver education course. In formulating this recommendation, the Committee refrained from also making a further recommendation as to the precise content such as course should take, which has, consequently, left this aspect open-ended.

Appendix 2 of the *Interim Report* summarises the general features of some courses and programs for novice drivers. The body of the *Interim Report* also cited the case of the ACT, which requires learner drivers to complete a classroom-based course.

The exact design of a course as recommended by the Committee should be left for technical experts to determine, taking into account evaluation of existing courses.

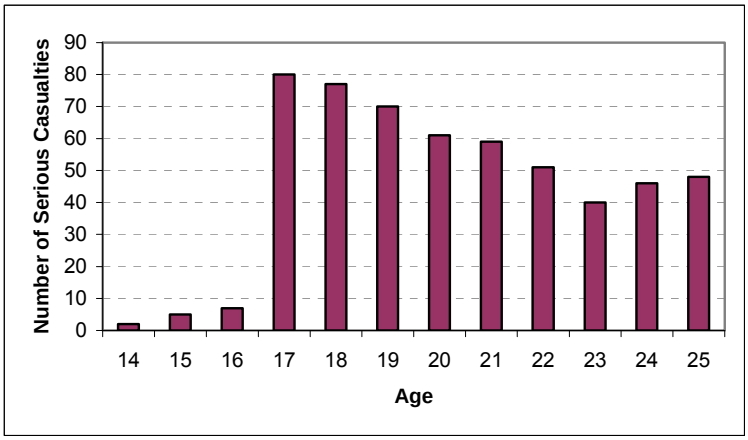
Learner drivers who are under supervision go from being the safest drivers on the road to being those at highest risk when they are granted a provisional licence.

Risk of Crashing and Driver Experience



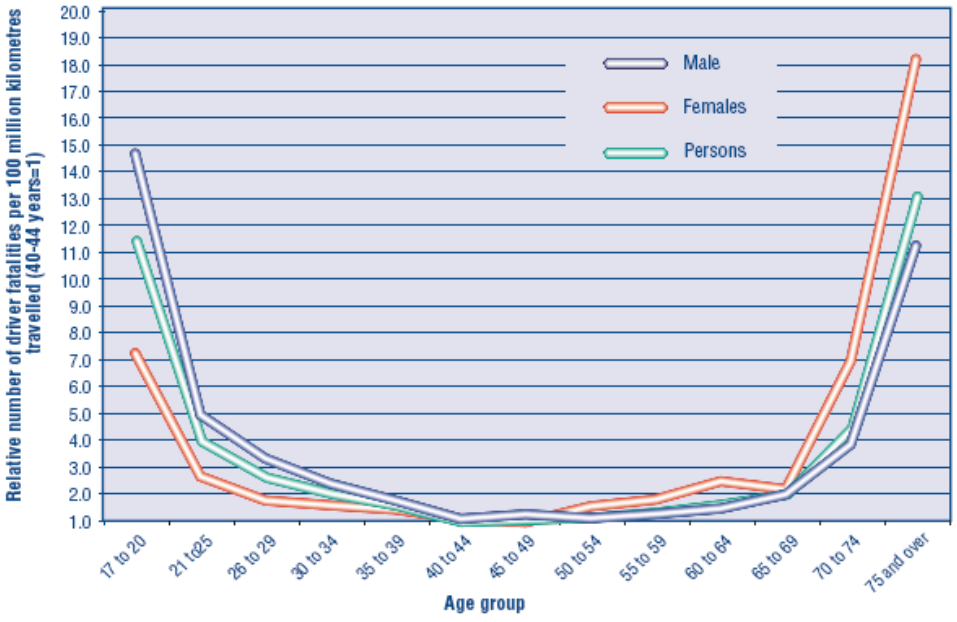
Source: Freebott

Light Vehicle Driver Serious Casualties by Age, 2000-2009, Tasmania[139]



Crash statistics show young people are over-represented as a proportion of road crash fatalities and serious injuries and are more likely to be involved in crashes on the basis of kilometres travelled.

Relative Risk of Death per Kilometre Travelled, by Age Group, 1998-2000

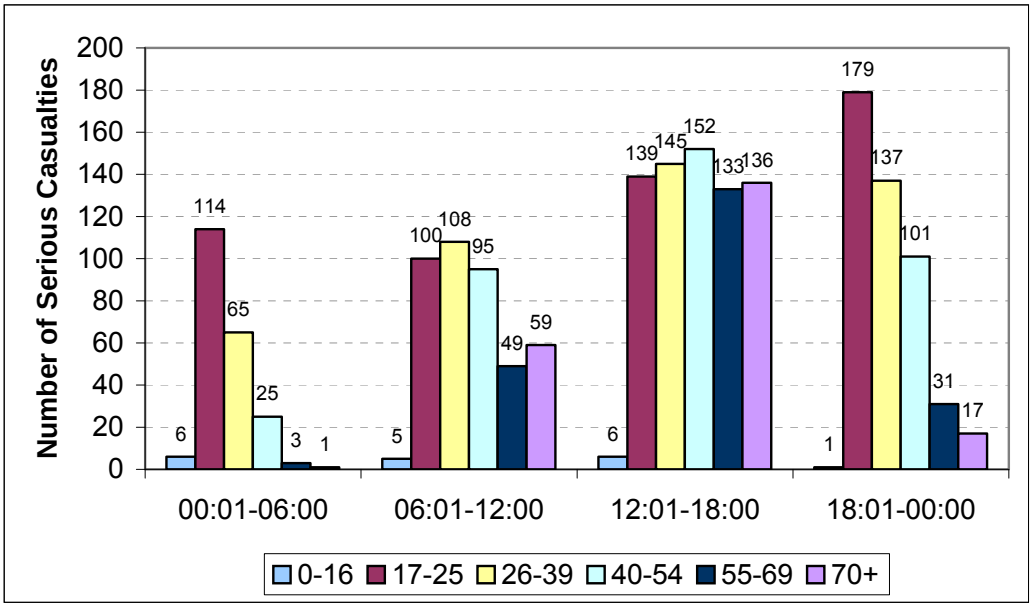


Source: ATSB, *Road Safety In Australia: A Publication Commemorating World Health Day 2004*, p. 224

[139] Information provided by Minister for Infrastructure, 20 August 2010

Analysis of light vehicle driver serious casualty crashes by age groups and time of day, in the table below, shows that during afternoon hours drivers of all ages are equally represented. However, during the midnight to 6:00am period, young drivers are outnumbering all other age groups combined. From 6:00pm to midnight, young drivers are shown to be over-represented.

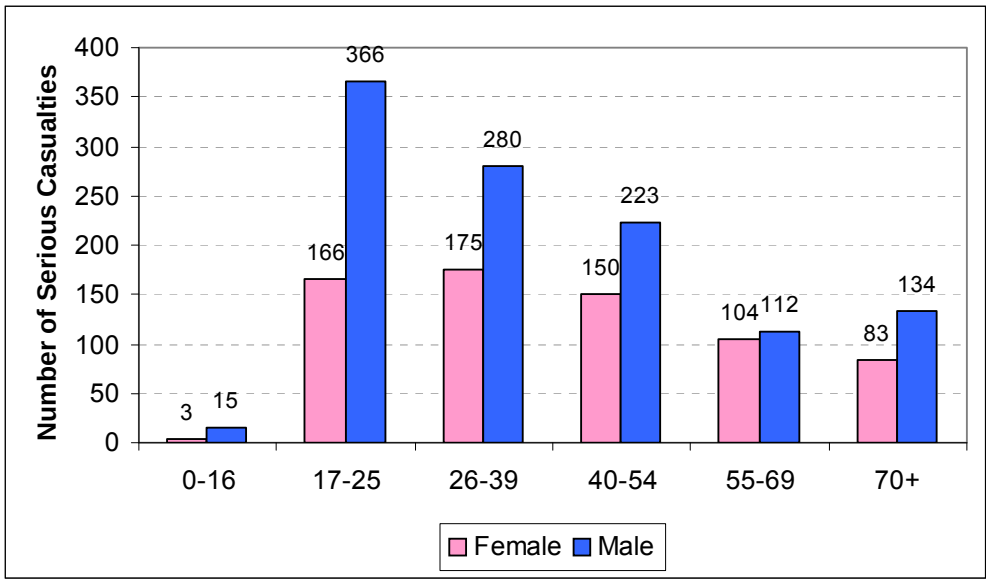
Light Vehicle Driver Serious Casualties by Age and Time of Day, 2000-2009, Tasmania[140]



[140] In some cases, the age or time of day was unknown; these casualties have been excluded. Information provided by the Minister for Infrastructure, 20 August 2010

When the same data is viewed in terms of gender and age groups, males are clearly over-represented, except in the 55 to 69 age group. Males aged 17 to 25 are especially over-represented.

Light Vehicle Driver Serious Casualties by Age and Gender, 2000-2009, Tasmania[141]



In summary, therefore, young males driving at night or in the early hours of the morning are especially at risk of being involved in a road crash.

Novice Driver Licensing Process in Tasmania

In Tasmania, novice drivers progress from a learner licence to a general "C" class licence in stages.

This is shown in the following table:

[141] Information provided by the Minister for Infrastructure, 20 August 2010

Tasmania's Graduated Driver Licensing Scheme for Car Licences[142]	
Licence Stages	Conditions
Driver Knowledge Test	• Be at least 15 years and 11 months old • Computerised knowledge test
Learner (L1) Licence	• Valid for 3 years • Minimum 3 months • No logbook required • Be at least 16 years old • L-plates • Supervisory driver required • Maximum 80km/h • Zero blood alcohol
L2 Practical Driving Assessment	
L2 Licence	• Valid for 3 years • Minimum 9 months • Logbook (50 hours supervised driving) • Be at least 16 years 3 months old • Supervisory driver required • L-plates • Maximum 80km/h • Zero blood alcohol
Provisional (P1) Practical Driving Assessment	
P1 Licence	• Minimum 12 months • Be at least 17 years old • P-plates • Maximum 80km/h • Zero blood alcohol
P2 Licence	• Aged 18 to 23: minimum 2 years • Aged 23 to 25: minimum 1 year or until 25 (whichever is longer) • Aged 25+: minimum 1 year • Zero blood alcohol
Full Licence	• Issued for 1 to 5 years • Be at least 20 years old • If during the P1 and P2 stages a driver does not commit an offence, provisional licence fees can be refunded[143] • Committing certain traffic offences and/or loss of licence can result in a driver reverting to the previous licence stage or having to restart the licence stage

[142] DIER, 'Tasmanian Road Rules', 6 April 2009, pp. 44-46; 'Novice Driver Reforms – Phase 1' (document d.56a); 'Novice Driver Reforms – Phase 2' (document 56b). There are some additional conditions that apply to L1, L2, P1, and P2 licences that are not included here, but are listed online; see <http://www.transport.tas.gov.au/novice/home> [accessed June 2009].

[143] McIlfatrick *et al*, transcript of evidence, 26 March 2009, p. 23

From August 2008 to April 2009, DIER has phased in changes to the graduated driver licensing scheme (GDLS) for car licences. The major changes have been increasing the licensing stages from three to four and introducing a second on-road test.

At age 16, a person can acquire a learner's licence (L1 licence) and the holder is permitted to drive under supervision and with restrictions. Following satisfactory completion of a practical driving assessment, a stage two (L2) licence is obtained, which similarly permits the holder to drive under supervision and with restrictions. To drive solo as a provisional driver (P1 licence), a person needs to pass a second practical driving assessment and be at least 17 years old. This licence, with restrictions, is held for one year, at which point a person advances to a stage two (P2) provisional licence. A P2 licence has a zero blood alcohol restriction. In one to two years, a person is granted a full licence.

Graduated driver licensing schemes that begin with a learner licence and then moves to a provisional licence phase for car drivers is standard across Australia, though specific aspects vary:

Learner Licence Stages

- The minimum age for the granting of a learner licence is generally 16 years, except the ACT which is 15 years and 9 months; (16 years in Tasmania)

- Learner licence applicants are required to pass a test. Most jurisdictions use a computer-based test; (Tasmania included)

- Most jurisdictions require learner drivers to complete by logbook a minimum number of hours. The number of hours ranges: 120 hours in NSW and Victoria, 100 hours in Queensland, 50 hours in SA, and 25 hours in WA. Some States require a portion of the hours to be night driving. Both the Territories do not mandate a minimum number of hours, however learner drivers in the ACT are required to attend a driving course (Road Ready); (logbook of 50 hours in Tasmania)

- There is a zero Blood Alcohol Concentration (BAC) restriction in all jurisdictions except for the ACT, where the restriction is at 0.02; (zero in Tasmania) and

- A speed limit restriction of 80km/h applies to learner drivers in NSW, SA, and NT; a limit of 100km/h applies in WA. No particular restriction applies in Queensland, Victoria, and ACT (80km/h restriction in Tasmania)

Provisional Licence Stage 1

- The minimum age in SA and NT is 16 years and 6 months; 17 years in NSW, Queensland, ACT, and WA; and 18 years in Victoria; (17 years in Tasmania)

- Most jurisdictions require learner drivers to pass a practical test to move to the provisional licence stage. In the ACT and SA, training and competency assessment with an instructor can be taken in lieu of a test. A hazard perception test method is used in WA and NSW; (practical driving assessment in Tasmania)

- A zero BAC restriction applies in most jurisdictions, except in the ACT, where the restriction is at 0.02; (zero in Tasmania)

- Queensland, ACT, and WA do not apply a speed restriction to provisional drivers. A 90km/h restriction applies in Victoria and NSW and 100km/h in SA; (80km/h in Tasmania)

- NSW, Victoria, and Queensland have some form of passenger restriction; and (Tasmania has no passenger restrictions)

- WA imposes a midnight to 5am curfew (exemptions apply) and in SA for provisional drivers disqualified for serious offences have a midnight to 5am curfew imposed for one year (no curfew in Tasmania)

Provisional Licence Stage 2

- Minimum age 17 years in Queensland, 17 and 6 months in SA and WA, 18 years in NSW and 19 years in Victoria; (18 years in Tasmania)

- Restriction on driving high-performance vehicles in NSW, Victoria, and Queensland (exemptions apply);[144] (no restriction in Tasmania)

- NSW, Queensland, and SA require P1 licence holders to undergo a hazard perception test to attain a P2 licence; (no second test Tasmania)

- A zero BAC restriction in most jurisdictions, except both Territories where 0.02 applies; (zero in Tasmania)

- A speed limit restriction of 100km/h in NSW and SA, other jurisdictions do not have a restriction; (no speed restriction in Tasmania) and

- Learner and provisional drivers have fewer demerit points than unrestricted licence holders (same in Tasmania)

Full Licence

- Minimum age in NT is 18 years 6 months, 19 years in SA and WA, 20 years in NSW, Queensland, ACT and 22 years in Victoria (20 years in Tasmania)

The above comparison shows differences in the detail of restrictions and conditions applicable during each licence stage, though structurally, the processes are similar nationwide.[145]

Deaths of young people in road crashes, when measured on a per capita basis in each State and Territory, show Tasmania as having the second-highest rate behind the Northern Territory. There is a hierarchical similarity between per

[144] Victorian authorities informed the Committee that exemptions could be granted in cases of hardship where the family vehicle is shared. Healy *et al*, transcript of discussion, 27 January 2009, p. 7

[145] Specifics of each State and Territory novice licensing has been sourced from information provided by DIER, 17 March 2009

capita fatality rates based on age groups in each jurisdiction and the whole-of-population fatality rates. It suggests that at least some of the variables accounting for higher or lower rates are unrelated to novice driver licensing processes and are broadly applicable to all drivers regardless of age, such as the age of the vehicle fleet and the quality of the road network.

Road Death Rates for People Aged 17 to 25 Years, Australia, 2009 (Per 100,000 population)		
	Aged 17 to 25	All ages
ACT	0.56	3.42
VIC	1.20	5.44
NSW	1.44	6.49
QLD	1.83	7.49
WA	1.94	8.81
SA	2.44	7.33
TAS	2.96	12.73
NT	3.96	13.79
Australia	1.63	6.90
Source: Adapted from Australian Road Crash Statistics Database; ABS 3101.0 (December 2009 Qtr); and *Road Deaths Australia*, December 2009		
Note: The numbers of 17 to 25 year old fatalities in the ACT in 2009 were low (2) and similarly were relatively low in Tasmania (9) and the Northern Territory (15). As such, small movements in the base figures could cause the per 100,000 population rate to fluctuate.		

Though novice driver licensing processes in Tasmania are fundamentally the same as the rest of Australia, witnesses nevertheless identified some particular aspects as being weaknesses.

One example was logbook fraud. Use of logbooks to count hours behind the wheel before taking a test is intended to ensure drivers have adequate experience and preparation before attempting a practical test. Mr Robert Bentley, a driving instructor, said there is "*a fair amount of anecdotal evidence about to say that people are fudging their logbooks"*, though he conceded this is difficult to prove.[146] Mr Barry Oliver (Advanced Driving Techniques) observed that *"dishonest recording is virtually impossible to detect"*, adding that people *"are definitely fudging the records."*[147]

A second example was the 80km/h restriction applied to learner and provisional drivers. Mr Tony Hennessy said that learner and provisional drivers should not be *"mobile chicanes"* by being restricted to 80 km/h.[148] Mr Robert Bentley was also critical, saying:

> *"I think it is crazy. As a driver trainer in Tasmania, I cannot even go out and teach a young person how to merge properly."*[149]

[146] Bentley, transcript of evidence, 21 October 2008, p. 73
[147] Oliver, transcript of evidence, 22 October 2008, p. 73
[148] Henessy, transcript of evidence, 22 October 2008, p. 34
[149] Bentley, transcript of evidence, 21 October 2008, p. 67

The Committee asked DIER officers why a restriction of 80 km/h is placed on learner and provisional drivers. Ms Angela Conway said:

> *"It's primarily there – it's a balancing act, all of this; working out what restrictions to list and when. It's really because when you look at the risk per crashes the first six months of a provisional period are the highest risks at all time when you drive. Our thinking was that if you suddenly lift that speed restriction in that first six months when people are at highest risk you're potentially increasing the risk."*[150]

A more significant issue were the accounts of witnesses associated with driver training schools, who alleged that current practical driving tests are deficient, providing a false sense of a person's driving ability and leading to novices who are only capable of passing a substandard test being subsequently awarded licences. Further, allegations were made that some testing officers in Tasmania are inadequately trained, entrap candidates and fail them for reasons unrelated to driving safely.

Mr Robin Eccles (President, Australian Driver Trainers Association Inc (Tas.)) said the test does not necessarily identify a candidate's skill deficiencies and relies upon subjective testing and assessment methods that candidates can meet through merely knowing how to pass the test rather than knowing how to drive properly.[151] He said:

> *"What driving instructors are having to do now is that we are teaching people to pass the test because that is what we get paid for. We are a commercial proposition; people pay us to get them licensed and we are actually teaching people the wrong thing to pass the test."*[152]

Mr Robert Bentley expressed similar views in his evidence.[153] Mr Eccles also added that testing officers have *"about a week's training",* are peer assessed, and *"they never get assessed on their knowledge of road law."*[154] He further stated that he has been aware of cases where testing officers have entrapped candidates and failed them for specious reasons.[155] Mr James Nicholson (Australian Institute of Advanced Motorists (Tas.)) resonated these views:

> *"The new two-stage system theoretically is very good. The first time you check and make sure they can handle the vehicle, then you let them do their 50 hours, bring them back in and make sure they can drive safely. But, if your testing officers are not trained to recognise safe driving behaviour, how do they test? They look for little, niggly things. They are looking for ways to fail rather than good, positive driving behaviour because they're not trained as assessors."*[156]

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[150] McIlfatrick *et al*, transcript of evidence, 26 March 2009, p. 25
[151] Eccles, transcript of evidence, 14 October 2008, pp. 33-34
[152] Eccles, transcript of evidence, 14 October 2008, p. 34
[153] Bentley, transcript of evidence, 21 October 2008, p. 61
[154] Eccles, transcript of evidence, 14 October 2008, pp. 40-41
[155] Eccles, transcript of evidence, 14 October 2008, p. 40
[156] Nicholson, transcript of evidence, 14 October 2008, p. 71

Mr Robin Eccles commented that all drivers should undergo a licence retest every ten years.[157] Mr David Cuff (John Bowe Driving Pty Ltd) agreed.[158]

Mr Richard Fowler (Registration and Licensing Branch, DIER), when asked by the Committee, said he was aware of claims testing officers had been unfair on candidates, but did not accept that testing officers act inappropriately. He stated:

> *"I can assure you that it does not happen. We hear all sorts of stories from the candidates when they come back. Then when they take the assessment sheet back home to mum or dad or whatever they actually ring us up or we follow up with the issue. The story that was actually passed on to mum or dad is quite dissimilar to in actual fact the truth. It was happening probably a lot more a couple of years ago but now we have a number of new assessors. They are really on the ball. I have not heard of one of those instances for at least 12 months. I must say that we used to have a very high number of complaints about the assessing officers but that has virtually dropped down to nil."*[159]

Anomalies

In addition to the above issues, the Committee was made aware that the novice driver licensing process is anomalous in at least two areas.

First, in Tasmania novice motorcycle riders are required to attend a practical riding course prior to obtaining a learner licence and again prior to obtaining a provisional level licence, whereas this is absent from the process of obtaining a car licence. DIER's submission stated, in contrast to its inconsistent views regarding education for novice drivers:

> "*DIER holds the belief that education on using off-road motorcycles can play a vital role in reducing the number of off-road motorcycle crashes*."[160]

Mr Tony Hennessy, for example, submitted that the training requirements for motorcycle licences *"should be mandatory for car drivers."*[161]

[157] Eccles, transcript of evidence, 14 October 2008, p. 46
[158] Cuff, transcript of evidence, 22 October 2008, p. 94
[159] McIlfatrick *et al*, transcript of evidence, 26 March 2009, p. 30
[160] DIER, submission, p. 4
[161] Hennessy, submission, p. 6

The process for obtaining a motorcycle licence is shown below:

Tasmania's Graduated Driver Licensing Scheme equivalent for Motorcycle Licences[162]	
Licence Category Stages	Conditions
Pre-Learner Motorcycle Training Course	• Be at least 16 years 5 months old • Course – 4 hours (approx) each day over 2 consecutive days
Driver Knowledge Test	• At least 16 years 5 months old
Learner Licence	• Valid for 12 months • Minimum 6 months • Be at least 16 years 6 months old • L-plates • Maximum 80km/h • Zero blood alcohol • No pillion passenger • Comply with LAMS (learner approved motorcycle scheme)[163]. LAMS is a list of motorcycles approved for novice riders to use based on power to weight ratios.
Pre-Provisional Motorcycle Training Course	• Be at least 17 years old • Course – 1 day (approx 7 hours)
Provisional (P1) Licence	• Minimum 12 months • Be at least 17 years old • P-plates • Maximum 80km/h • Zero blood alcohol • No pillion passenger • Comply with LAMS
P2 Licence	• Aged 18 to 23: minimum 2 years • Aged 23 to 25: minimum 1 year or until 25 (whichever is longer) • Aged 25+: minimum 1 year • Zero blood alcohol
Full licence	• Issued for 1 to 5 years • Be at least 20 years old

Secondly, in accumulating 50 hours of logged driving time as a learner driver, one hour with a parent is valued equally with time spent with a qualified instructor. As Mr Barry Oliver (Advanced Driving Techniques) pointed out to the Committee:

[162] DIER, 'Tasmanian Road Rules', 6 April 2009, p. 47

[163] For a description of approved motorcycles is issued by DIER; see <http://www.transport.tas.gov.au/__data/assets/pdf_file/0003/16824/fact_sheet_LAMS_approved_motorcycles.pdf> [accessed September 2010]

"The minimum requirement to be a supervisor is that you must have a full licence and have had no licence disqualifications or suspensions in the past two years. No examination is required and there is no testing to establish that the supervisory driver is competent. Contrast that to the licensed driving instructor who is required to complete a competency-based course to Certificate IV standard at a cost of $3,500. The anomaly there is that one hour with dad is treated the same as one hour with a driving instructor. That seems crazy to me."[164]

Time spent entirely with unqualified supervisors, in the Committee's view, poses a risk that incorrect and erroneous information will be taught to novice drivers.

Issues related to testing standards, witnesses argued, could be alleviated through requiring novice drivers to complete a compulsory training course, which would ensure all novice drivers meet an acceptable standard.[165]

Driver Education and Training

Defining the meaning of driver education and training with clarity is problematic. The terms 'driver education' and 'driver training' have sometimes been treated synonymously despite also having distinct and separate meanings. When a distinction is intended, driver training pertains to vehicle operation or handling skills whereas driver education addresses knowledge and attitudes. In some cases this may be indistinguishable where courses contain both practical and theoretical content.[166] There are also several typologies of driver training:

- *"Pre-licence – to provide people with the necessary vehicle control skills and road law knowledge to qualify for a driver licence;*
- *Defensive driving training – offered at a post-licence level with the aim of helping drivers avoid getting into critical situations;*
- *Advanced driving courses – offered at a post-licence level with the aim of helping drivers cope with critical situations that may arise; and*
- *Driver improvement training – targets accident/violation involved drivers with a view to reducing recidivism and reducing crashes."*[167]

Notwithstanding issues of terminology, many witnesses expressed great concern and frustration that driver education and training has been an overlooked and neglected aspect of road safety strategic policy in Tasmania, due to the State's transport bureaucracy opposing measures in this area. The Committee is similarly frustrated and concerned. Tasmania's peak motoring association, the

[164] B. Oliver, transcript of evidence, 22 October 2008, p. 73
[165] B. Oliver, transcript of evidence, 22 October 2008, p. 73; Bentley, transcript of evidence, 21 October 2008, p. 73; Eccles, transcript of evidence, 14 October 2008, p. 34
[166] Senserrick, Teresa, and Haworth, Narelle, 'Review of Literature Regarding National and International Young Driver Training, Licensing and Regulative Systems', MUARC, report 239, June 2005, p. 5
[167] Christie, Dr Ron, 'The Effectiveness of Driver Training as a Road Safety Measure: A Review of the Literature', November 2001, p. 4

RACT, called for "*the teaching of road safety education in Tasmanian schools to be compulsory for all Tasmanian Year 9 and 10 students.*"[168]

Mr James Nicholson (Australian Institute of Advanced Motorists (Tas)) said:

> *"The parents of the young drivers who come through our courses come back to me with the same message – why isn't this compulsory? The answer is the bureaucrats do not think it works."*[169]

Eighteen-year-old Ms Lauren Scott told the Committee she found her participation in a driver training course as a novice driver to be valuable.[170] She said:

> *"I found it very helpful. What I learnt in that one day of an eight-hour course has absolutely impacted on my driving since. I have become just so much more aware of potential hazards on the road. I think the course would definitely benefit young drivers most of all, but everyone should be able to get a benefit from it."*[171]

Mr Nicholson also remarked:

> *"Once you are taught to do something properly you will do it that way forever and if you are taught to do it badly you will do it that way forever because no-one ever checks you again after your licence."*[172]

Mr Barry Oliver said that considering the cost of fatal crashes to the community, the State Government *"should consider subsidising mandatory defensive driver training courses for learner drivers."*[173] He also said:

> *"In the past when I have suggested all learner drivers undergo a compulsory defensive driver training course as part of their training, the responsible minister has denounced the idea as not appropriate. Interestingly, none have ever done the course and, based on their response, have very little idea what the course involves."*[174]

Dr Robert Walker (Australian Medical Association (Tas.)) said a *"driving laboratory"* should be established for school groups to attend and be shown videos and films of cause and consequences.[175] He also said:

> *"They do not want to be trapped or tricked. If you can give them good information and they can see where it is coming from, they can understand that. The problem we have with kids is that they adopt the parental attitudes of driving, the attitudes of their brothers and sisters and the neighbour next*

[168] RACT, submission, p. 11
[169] Nicholson, transcript of evidence, 14 October 2008, p. 67
[170] Scott, submission
[171] Scott, transcript of evidence, 6 May 2009, p. 66
[172] Nicholson, transcript of evidence, 14 October 2008, p. 80
[173] B. Oliver, transcript of evidence, 22 October 2008, p. 74
[174] B. Oliver, transcript of evidence, 22 October 2008, p. 73
[175] Walker and Steven, transcript of evidence, 26 March 2009, p. 94

door and all those sorts of things and so they are not necessarily getting good exposure to sound experience."[176]

In its submission, Driver Safety Services suggested *inter alia* that the P2 licensing period should be reduced by 12 months where a driver has successfully undertaken an approved safe driving course.[177]

The exact purpose, structure and content of specific courses can vary. Some courses do involve a practical element, others are classroom-based, some courses are targeted at novice drivers only and others are for drivers with varying degrees of experience. Such courses include those provided by:

- The Australian Institute of Advanced Motorists
- John Bowe Driving Pty Ltd
- The Tasmanian Skills Institute (Arrive Alive)
- Keys2Drive
- Advanced Driving Techniques
- Road Ready
- Road Ready Plus
- Driver Skills Australia
- Driver Safety Services (Crash Free Driving Program)
- CAMS Ignition

Other general programs include:

- Rotary Youth Driver Awareness (RYDA)
- NRMA Youth and Road Trauma Forum (in NSW).

Appendix 2 of the Committee's *Interim Report* contains more detailed information of a selection of courses and programs, including those cited above.

Driver education can also more broadly involve educating the public as a whole. Mr John Bevins, whose company produces road safety advertising for education campaigns interstate, said:

"The thing that we believe very strongly as an advertising agency is that you cannot change attitudes with advertising. Many advertising briefs say we want to change attitudes. The goal of advertising is to change behaviour by working with existing attitudes and I think it is really important to get to understand what the existing attitudes are of the target audience you are dealing with and use those attitudes to bring about a behavioural change."[178]

Mr Robin Eccles (President, Australian Driver Trainers Association (Tas.)) commented:

[176] Walker and Steven, transcript of evidence, 26 March 2009, p. 95
[177] Driver Safety Services, submission, p. 6
[178] Bevans, transcript of discussion, 2 February 2009, p. 2

"Experts have looked at the word 'attitude' and they cannot work out what it is, but everybody talks about this attitude business. …Your worldview comes into it. Your optimism, pessimism, bias comes into it and it is a very, very complicated thing."[179]

Of particular interest to the Committee were the Road Ready and Road Ready Plus courses offered to novice drivers in the ACT. Completing the 'Road Ready Learner Licence Course' is necessary to acquire a learner's licence in the ACT, whereas Road Ready Plus is optional.[180] The Committee met with Mr Simon Abbott and Mr Rick Freeth, Directors of Freebott, a company that delivers the Road Ready and Road Ready Plus courses in the ACT.

The Road Ready course has three components:

"A classroom program that includes a range of interactive activities designed to help make young people aware of issues relating to safer road use before they begin to learn to drive;

Encouragement for parents or carers to make time available for extra driving practice for learner drivers;

Support for provisional licence holders with information, and encouragement to participate in a workshop around the experiences of driving in the first six months of having a licence."[181]

If facilitated through schools, there is generally no cost to the participant; otherwise the cost is $155.[182]

Road Ready Plus is an extension of the Road Ready course undertaken after six months of unsupervised driving.[183] Mr Abbott explained to the Committee:

"The next time that they come to us is for an optional course, which we call the 'P off' course, but the correct name is the Road Ready Plus course. … Once they have had six months' driving experience they come back in and have a facilitated discussion group looking at how their experiences have been so far and sharing with their peers how it has been going for them. The carrot for that is that if they complete that three-hour course they will no longer have to display their P-plates and they will be issued an additional allowance of four demerit points."[184]

Mr Freeth said:

"I think one of the most encouraging things that we hear from participants is, 'I didn't know that I didn't know that stuff'. I think that is the area that we would like to tackle, the unintentional risk which is still a factor. There are the 10 percenters that you will never change so they are going to have to be

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[179] Eccles, transcript of evidence, 14 October 2008, p. 42
[180] ACT Territory and Municipal Services, *ACT Road Rules Handbook* (ACT Government, Canberra, 2009), p. 5 (d122)
[181] See <http://www.roadready.act.gov.au/popups/about.htm> [accessed September 2010]
[182] Freeth and Abbott, transcript of discussion, 4 February 2009, p. 2
[183] ACT Government, 'Road Ready: Learning Through Practice', [undated] (pamphlet) (d119)
[184] Freeth and Abbott, transcript of discussion, 4 February 2009, p. 2

dealt with in other ways. There is a huge percentage of people who, with better information or greater awareness of the situation, will change their behaviour."[185]

The Committee was provided with copies of two evaluations of the Road Ready programs[186] and met with Mr John Catchpole (ARRB Group), who co-authored an evaluation of Road Ready Plus. He said:

"It is a classroom program and it doesn't involve any on-road practice. I was part of the team that was evaluating it and we couldn't get access to crash data. In terms of offences it was difficult to find out if the program reduced the commission of offences after people had been through because the kind of drivers who were attracted into the program were those who already had a bad offence record. … …People who went through the program actually committed more offences than people who did not go through, not because the program was harmful but because of the type of people it attracted. So it is was difficult to know whether the program was beneficial in terms of offence reduction."[187]

The Road Ready and Road Ready Plus courses have appealed to this Committee as possible models that could be included among novice driver licensing processes in Tasmania.

DIER's Position on Driver Training and Education

The evidence of DIER officers appearing before this Committee was dismissive of driver training and education because academic literature and research has found it not to be an effective measure. DIER argued that novice driver skill development has been, and continues to be, effectively advanced through spending time on the road under supervision.[188] Equivalent transport authorities in Victoria and NSW, with whom the Committee met, provided a similar viewpoint.[189] Ms Penny Nicholls (General Manager Land Transport Safety, DIER) said: *"Defensive or advanced driver training has not been proven to reduce casualty crash risk."*[190] The Committee, however, views this statement as a generalisation that overlooks examples of robust courses and programs being offered.

In the Committee's view:

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[185] Freeth and Abbott, transcript of discussion, 4 February 2009, pp. 25-26

[186] Di Pietro *et al*, 'Evaluation of the Inexperienced Solo Driver Program Road Ready Plus', [undated] (ACT.d27); Steer Davies Gleave/ACT Dept of Urban Services, 'Evaluation of the ACT Novice Driver Program – Road Ready Plus: Has Road Ready Made a Difference? (Final Report)', April 2004 (ACT.d28)

[187] Cairney *et al*, transcript of discussion, 28 January 2009, p. 15

[188] McIlfatrick *et al*, transcript of evidence, 26 March 2009, pp. 33-34; Green and Nicholls, transcript of evidence, 17 June 2009, pp. 15-16

[189] Healy *et al*, transcript of discussion, 27 January 2009, p. 10; Job and Elliott, transcript of discussion, 2 February 2009, p. 5

[190] Green and Nicholls, transcript of evidence, 17 June 2009, p. 14

- The courses evaluated in the literature were among an earlier generation of courses that indeed, were perhaps ineffectual, but have since been superseded by a newer range of courses taking different approaches;

- The typologies of courses evaluated have tended to fit the definition of defensive or advanced driver training and have not necessarily been suited to or aimed at novice drivers;

- There are very few compulsory courses aimed at novice drivers; and

- There is no evidence to show that driver training and education is positively ineffectual, even if its effectiveness might be doubted.

The Committee questioned Mr Norm McIlfatrick (Secretary, DIER) and Richard Fowler (Licensing and Registration Branch, DIER) at length on the issue of driver training and education. This is reproduced at some length as it illustrates the Department's surprisingly inflexible and intractable position:

> *CHAIR – It seems natural, if people are undertaking examinations and tests for all sorts of things, that they have a course of instruction; it is a basic thing, except in driver licensing.*
>
> *Ms FORREST – Expect them to pick it up by osmosis.*
>
> *Mr McILFATRICK – I don't think that is the case. There are classroom studies, and there is instruction both web-based and handbook-based, combined with the supervised driving process, so we are probably talking about how instruction is delivered rather than whether instruction is given.*
>
> *Ms FORREST – But it is not compulsory for someone to go on line and do – except for their road rules test. That is the only thing that is compulsory.*
>
> *Mr McILFATRICK – It is compulsory before they get to the practical on-road test that they have actually acquired skills and absorbed information and been supervised in doing that. I think the supervisory approach, whether that is a learner driving school or a parent or whatever, is a competency-based process.*
>
> *Ms FORREST – You are assuming that all parents are competent, then, to teach their children?*
>
> *Mr McILFATRICK – I am assuming that they will be supervised on the road certainly through the two phases, and in that process will need to have a practical test and a knowledge test on two occasions, so I guess it is a matter of whether we believe they would learn more in the classroom or more in a practical sense on the road and with –*
>
> *Ms FORREST – Can't you have it both, though?*
>
> *CHAIR – Yes, why not both? I would have thought both were essential.*
>
> *Mr McILFATRICK – Our information is that the mix of things we have done at the moment is going to achieve the results we are aiming for.*

Mr FOWLER – It is not to say, though, that this is a line in the sand, that we are not going to review it, because we are continually reviewing the licensing, the other strategies for these novices who actually have an attitude issue when they get their Ps. There is a plethora of information and, yes, you can't make them do it, but again simply in a classroom just by making somebody go from a 9 o'clock to a 10 o'clock seminar does not actually mean they are going to absorb that information. A lot of it is their behaviour and their attitude.

CHAIR – That is the whole thing.

Mr FOWLER – You can teach them how to pass, and this is just like passing anything at uni or wherever. You end up with a certificate, but that is when you actually start your real learning, and that is a fact of life.

CHAIR – But how can you be confident that they are going to have the best possible attitude when they are not even required to have any course of instruction to be advised about the essentials of driving?

Mr FOWLER – In the first assessment [to acquire an L2 Licence], one of the requirements of the driving assessors is to actually walk through because, as Angela just said, it is a practical skills set assessment. They will also be advised: 'This is what you are going to be expected to be able to do in the second assessment [to acquire a P2 Licence]. You're going to be actually expected to identify that that person there may be a person of hazard, actually will walk off the street, or the lights might change'. And there will be a number of those set, and so they will be advised how to actually learn more in terms of how they can drive more safely on the road.

Ms FORREST – Isn't it better teaching that up front so they can actually look at and develop those skills over time? … If you do not actually give them some idea of what hazards are out there and get them to identify hazards – without saying, 'That person there is a hazard, that bike is a hazard, that truck is a hazard', you say instead, 'When we drive along this road' – on the TV – 'you tell me what the hazards are'. Is that not a way of actually helping them to get those skills and then refine them in that driving period right from when they get their first L licence?

Mr FOWLER – As I mentioned a while ago, some of the jurisdictions do have that computerised hazard perception. I mentioned the evaluation of that, having talked with colleagues on the mainland but whilst you hear what they say, the evaluation was that it was not as good as what is going to happen here in terms of having the candidates out on the road in real-life situations rather than in –

Ms FORREST – But they are not doing one or the other, they are doing that and then putting the learners out in the road.

CHAIR – One is not exclusive of the other.

Mr FOWLER – No. It is a complex equation. It is a complex environment.

Ms FORREST – The way you are putting it across it sounds like in some States they just do the training and say, 'Okay, now come for your licence test'. That is not what is happening. They are saying, 'Do this course of instruction', or whatever you want to call it, 'and then go and do your 50

hours'. I think in some States it is even more than that. It is 100 hours in some, before you can actually go for your provisional licence test. It is not saying that you do one or the other; you actually have to do both.

The Committee then advanced questions specifically relating to the Road Ready and Road Ready Plus courses:

CHAIR – Did you or did anybody from Tasmania go and see what the procedure is in the ACT as Ms Forrest did?

Mr FOWLER – Not physically. I have visited there several times and I have been to some of their registries and seen how it works, but not specifically to talk one on one, but a range of research information was received from all of the jurisdictions. Every jurisdiction, without a doubt, is different in their novice reforms. That is one of the issues nationally that we need to face. For example, Western Australia only have 25 hours compulsory supervisor driving. Some others do not have the hazard-perception test. Some have an exit from their P to their full car licence. New Zealand is completely different as well.

[…]

CHAIR - You say that every jurisdiction is different but there is only one in Australia, I think, where there is a requirement for a course of instruction. I would have thought that, as you are bringing in new measures here, somebody from Tasmania would have gone to test that, to –

Ms FORREST – To experience it.

CHAIR – Yes, experience it and make an evaluation.

Mr FOWLER – All I can say, again, is that we did the analysis. I suppose only one jurisdiction out of eight has that. Probably there is another supporting factor in maybe it does not work because the ACT is the only jurisdiction that does it. None of the others do.

The Committee notes with approval that some other Government Departments, Agencies and Government Businesses have either provided for or sponsored their employees to attend driver education courses. Transend Networks and Aurora Energy, for example, advised the Committee that they have offered their staff the opportunity to attend the Crash Free Driver program provided by Driver Safety Services.[191] It is therefore incongruous that DIER opposes such driver education and training for the general public.[192]

A literature review of driver training and education conducted in 2001 and provided to the Committee by DIER is consistent with the views of DIER officers:

"As with other areas of novice driver training, there is no clear evidence that post-licence training for novice drivers leads to reductions in crash or violation involvement. … From a theoretical perspective, there is support for

[191] Transend, submission; Aurora Energy, submission p. 2

[192] Butcher, transcript of evidence, 24 March 2009, p. 2; Cameron, transcript of evidence, 24 March 2009, pp. 53-54

the development and application of training that targets optimism bias, over-confidence and attitudinal/motivational factors that influence safe driving behaviour. Several programs using this approach – sometimes referred to as insight training – have been trialled… . However, there is little evidence thus far that this type of training reduces crash/violation risk among novices as few crash-based studies of these newer approaches have been completed."[193]

However, a separate literature review conducted by MUARC in 2003 was less dismissive of such 'insight training' programs:

"While there is general agreement in the academic community that research has clearly established that traditional skills-focused training is counter-productive for novices, there is still some uncertainty about whether insight training is effective in reducing crash involvement. At minimum, research has not found a counterproductive effect, as is true of traditional programs. Emerging research, however, is providing stronger support for theoretical assertions that the insight approach offers the most promise in developing effective programs for the at-risk novice driver."[194]

A more detailed extract from the MUARC review is reproduced below:

"An early evaluation of insight training with novice drivers was reported by Gregersen (1996b). The study contrasted two groups. Both were briefed on basic theory of driving on icy roads, and on braking and avoidance manoeuvring. However, in addition, one group received skid training on a closed driving practice area – the 'skill group'. The other group drove on the same circuit but did not receive any skill guidance in order to demonstrate that even if they knew the basic theory, they could not rely on this in a critical situation – the 'insight group'. Surveys and course participation one week after training showed that the skill group estimated their skills to be at a higher level than the insight group, even though they did not differ on actual skills. These findings suggested insight-trained drivers were less likely to report overconfidence in their driving ability; a positive attitudinal change, although the study did not include a control group.

A later (1999) study of the full *Swedish Insight Program* for novice drivers was conducted by Nyberg and Engström (1999). They also reported some positive attitudinal outcomes of the program (mostly in relation to seat-belt use); however, they failed to find differences among test and control groups in attitudes relating to vehicle following distances, and speed and road conditions. The researchers concluded that the program showed potential; however, modifications were still needed to enhance safety outcomes.

In line with the Swedish research, a compulsory driver-training program, undertaken from an insight approach, was introduced in Finland as part of their licensing system. The program takes place from between six months to two years post-licensing. … A crash-based evaluation of the program examined self-reported crash and exposure surveys of 30,000 drivers, on claims data from all Finnish insurance companies, and on longitudinal self-evaluation surveys of over one thousand drivers (immediately following licensing, ½-1 year later, and 547 drivers 4-5 years later) (Keskinen, Hatakka, Katila, Laapotti & Peräaho, 1999).

While Keskinen et al (1999) found little evidence of an effect during the first year following the program, differences were reported in the long term. For the four-year period following introduction of the program, they found a 25% decrease in crashes in slippery road conditions for 18-20 year-old males and a 50% decrease for males aged over 20 years. An 18% decrease was

[193] Christie, Dr Ron, 'The Effectiveness of Driver Training as a Road Safety Measure: A Review of the Literature', November 2001, p.

[194] Senserrick, Teresa, and Haworth, Narelle, 'Review of Literature Regarding National and International Young Driver Training, Licensing and Regulative Systems', MUARC, report 239, June 2005, p. 12

found for 18-20 year-old females. There was no significant change for females aged over 20 years. Similar percentage decreases were reported for crashes in the dark. The extent to which the reductions could be attributed to the new training program was complicated by the finding that there was a downward trend in crashes in Finland in general during the analysis period. However, crash reductions in the 2-4 years following the program were more marked than for the general crash trend. Therefore, the researchers concluded that the program contributed to crash reductions.

A recently released follow-up to the Swedish research, undertaken with older male drivers (in their twenties), has again found positive tendencies but no significant overall effect of insight training, although skill-based training was again shown to be counterproductive (Nolén & Nyberg, 2001). Notably, however, these general interpretations are based on an English abstract (only) of a Swedish report. Recent discussions with the first author (Nolén, 2003), confirm that the findings still strongly support various aspects of the *Swedish Insight Program* but highlight areas that need to be developed further. It is noteworthy that, following local research findings on the insight versus skills-based approach, Sweden revised its compulsory skid training program in their national licensing system to be conducted from an insight approach, as per Gregersen's (1996b) study (Berg, 2003).

Some Australian research has also shown support for the insight approach (Senserrick & Swinburne, 2001). The research evaluated a driver-training program developed for 18-25 year-old recently-licensed Provisional drivers based on insight principles. It includes both classroom theory and off-road practical sessions conducted over a one-day period. A survey of participants and controls pre and post-training and a 10-12 week follow-up, found positive shifts in attitudes and self-reported behaviour, particularly for young males."

From Senserrick, Teresa, and Haworth, Narelle, 'Review of Literature Regarding National and International Young Driver Training, Licensing and Regulative Systems', MUARC, report 239, June 2005, pp. 12-13

The Committee is of the view that the absence of a compulsory educational road safety and driver awareness program is a glaring omission in the novice driver reforms and in Tasmania's Road Safety Strategy.

DIER Officers appearing before this Committee have been adamant that driver training and education is not an effective means to reduce the risk of novice drivers being killed and injured in road crashes. However, the Committee believes that, in making the latter assessment, the Department has most likely ineptly confused the results of studies relating to post-licence advanced driver training on a skid pan as being equally applicable to pre-licence courses aimed at novice drivers that use completely different approaches.

As a result, the Department has seen fit to maintain that there is no evidence that introducing such a regime would benefit novice drivers. The Committee rejects this position and is firmly of the view that requiring novice drivers to compulsorily attend a driver education course would reduce the propensity for young people to be involved in road crashes through a focus on driver attitude.

In view of the over-representation of young drivers in crash statistics, it is both surprising and unacceptable that the State Government and the Department have refused to implement a compulsory driver education course. The Committee strongly recommends that this situation be rectified without further delay.

Elderly Driver Licensing

The Committee notes recent coverage in the *Sunday Examiner* relating to a requirement in Tasmania that drivers aged 75 and above undergo annual medical tests and that drivers aged 85 and above undergo an annual on-road driving assessment.[195]

Mr Jim Langford (MUARC) observed that paradoxically, whilst older drivers "*are probably the safest group on the road*", a small number suffering advanced dementia and functional impairments "*clearly should not be on the road*." He told the Committee that Tasmania's mandatory assessments are "*the most draconian*" in Australia and suggested that assessments should occur only if an older person's doctor or family members have cause to notify authorities that a problem exists.[196]

The State Government has released a discussion paper on the subject of older driver licensing and possible options to replace the existing requirements. The paper states at the outset:

> "*Based on evidence DIER believes that annual mandatory on-road driver assessments from the age of 85 years should cease*."[197]

The Committee urges the community to provide comment to the Department in response to the discussion paper.

[195] Van Ryn, Claire, 'The Long and Winding Road of the Age Debate', *Sunday Examiner*, 3 October 2010, p. 27

[196] Mitsopoulos-Rubens *et al*, transcript of discussion, 28 January 2009, pp. 43-44

[197] DIER, 'Discussion Paper: The Review of the Older Driving Licensing System in Tasmania, August 2010, p. 3

Findings

The Committee found that –

16. In view of the over-representation of young drivers in road crash statistics, it is both surprising and regrettable that there is no compulsory driver education course in Tasmania.

17. Novice drivers would benefit considerably from undertaking a compulsory driver education course.

18. DIER's intransigent failure to require novice drivers to undertake a driver education course is unacceptable and contrary to the weight of evidence received by the Committee and the objectives of road safety.

19. The imparting of knowledge through a compulsory driver education course would assist in mitigating novice drivers' lack of experience, a major causal factor of road crashes.

20. There is no 80km/h speed restriction applied to provisional licence holders in other Australian States and Territories.

21. There is lack of uniformity in the specific requirements and restrictions applied to novice drivers among Australian jurisdictions.

22. The novice motorcycle rider licensing process in Tasmania is more rigorous than for novice drivers, and it is astounding that a similar model is not in place for novice drivers.

Recommendations

The Committee recommends that –

8. There be an approved compulsory driver education course for novice drivers in Tasmania prior to obtaining a L1 licence.

9. Incentives be provided to holders of P1 licences who undertake additional driver education courses. Such incentives should not include altering the zero BAC restriction.

10. The Minister for Infrastructure, through the Australian Transport Council, take steps to achieve national uniformity in relation to novice driver licensing restrictions and regulations.

11. The speed restriction for L1, L2 and P1 drivers in Tasmania be raised to 90km/h, as a first step towards national uniformity.

12. There be an evidence-based review of the number of logbook hours learner drivers be required to complete.

5 Alcohol and Drugs

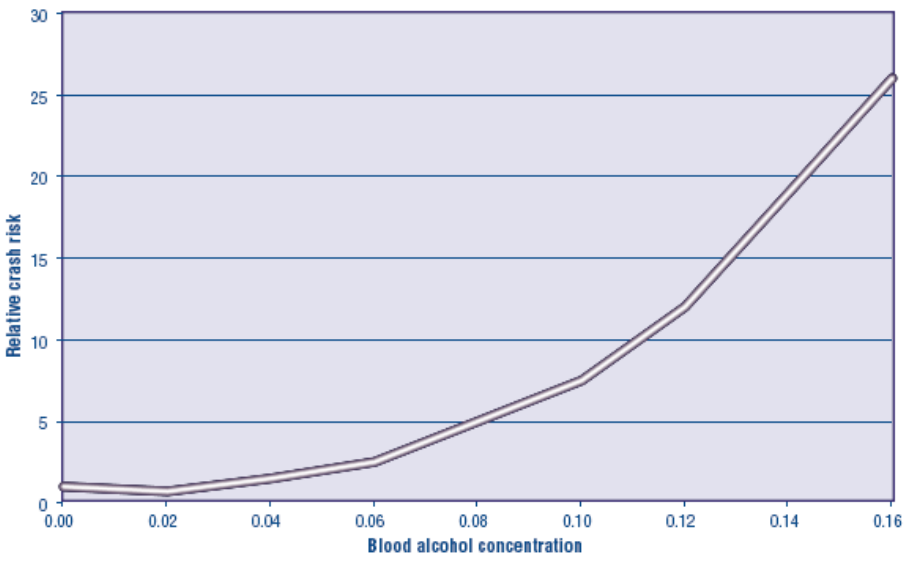
Alcohol has been consistently among the factors most frequently cited as contributing to fatal and serious injury crashes in Tasmania. In recent years, drugs, including illicit, prescription and those available over-the-counter, have been increasingly identified as a factor in fatal and serious injury crashes.

Since 2005, when drug testing of motor vehicle drivers was introduced, they have been cited more frequently in the middle range of factors contributing to fatal and serious injury crashes in Tasmania.

Prior to this time, drugs were cited as a factor at a low frequency, including at "*zero*" in the year 2000, a result probably more related to the level of drug testing than the true impact of drugs on driver behaviour in those years.

Research has confirmed the correlation between a driver's blood alcohol concentration (BAC) at certain levels and relative crash risk, showing that as the BAC level increases, the driver's crash risk also increases.[198]

Relative Crash Risk and Blood Alcohol Concentration



Source: ATSB, *Road Safety In Australia: A Publication Commemorating World Health Day 2004*, p. 119

Mr Andrew Griffiths (Tasmanian Forensic Science Service) supplied the Committee with results of his own analysis of blood specimens for the presence of alcohol and drugs collected from a sample of 587 drivers involved in crashes from July 2005 to December 2007 in Tasmania. A small number of samples were

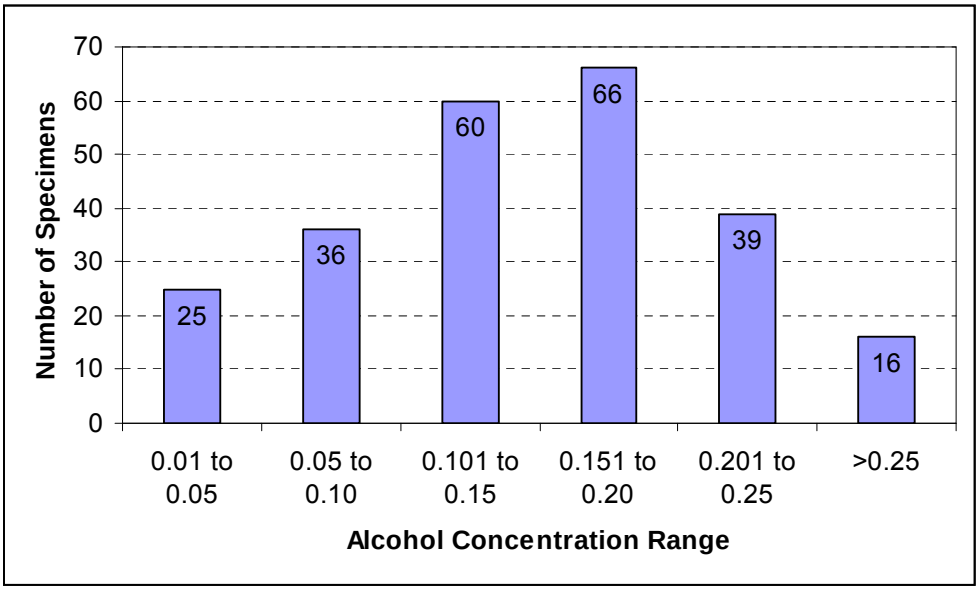
[198] McLean, A J *et al*, 'Alcohol and Crashes: Identification of Relevant Factors in this Association', Department of Transport Office of Road Safety, CR 11 1980

excluded for technical reasons. Analysis of BAC levels within the remaining sample showed:

- Alcohol was identified in 242 (43.5%) of 556 samples analysed for alcohol
- 217 (39%) were identified at above the 0.05 legal limit
- Over half had a BAC range of between 0.1 and 0.2
- Some had a BAC range above 0.2 and as high as 0.362.[199]

This information is shown in graph form below:

The Number of Blood Specimens Containing Alcohol Within Different Concentration Ranges[200]



Source: Griffiths, 'Illicit and Licit Drugs in Blood Collected from Tasmanian Motorists'

The following table shows the total number of fatalities in each age grouping (over an eight-year period) in the following categories: the total with a nil BAC level, less than 0.05, greater than 0.05 and the number of fatalities where the BAC was unknown. The data is from Western Australia rather than Tasmania. Notwithstanding this, the very apparent trend is that younger males are over-represented in fatal crashes involving alcohol.

[199] Griffiths, Andrew, 'Illicit and Licit Drugs in Blood Collected from Tasmanian Motorists', November 2008 (provided by Mr Griffiths), p. 122

[200] Griffiths, Andrew, 'Illicit and Licit Drugs in Blood Collected from Tasmanian Motorists', November 2008, p. 123

Road Crash Driver and Rider Fatalities by BAC Levels, Gender and Age, Western Australia, September 1996 to December 2004[201]					
	Total Fatalities	Nil	<0.05	>0.05	Unknown BAC
Male					
17-29	638	273	36	167	162
{ 17-20	264	117	19	58	70
{ 21-24	187	72	9	59	47
{ 25-29	187	84	8	50	45
30-39	322	153	10	81	78
40-49	230	125	5	32	68
50-59	176	96	2	15	63
60-69	83	47	1	8	27
>69	76	57	0	0	17
Female					
17-29	169	96	6	23	44
{ 17-20	72	49	1	6	16
{ 21-24	51	26	1	9	15
{ 25-29	46	21	4	8	13
30-39	93	47	3	19	24
40-49	70	39	2	5	24
50-59	49	30	0	1	24
60-69	24	14	0	0	10
>69	34	23	0	0	11

A notable point relating to the above statistics is that the presence of drugs is not shown. The possibility cannot be excluded that in some cases both drugs and alcohol affected a driver involved in a crash. Thus, for example, some drivers involved in crashes returning low alcohol readings might have been drug-affected, but this is not discernable in the above table.

Indeed, among the specimens within Mr Griffiths' sample, there were instances where both alcohol and a drug (or multiples of drugs) were present.[202]

The Committee is nevertheless satisfied by the above data that there is a disproportionate tendency for young male drivers to be involved in road crashes involving alcohol.

As discussed in the Committee's *Interim Report*, witnesses who gave evidence were asked whether or not they considered the 0.05 limit should be reduced to zero or to a limit less than 0.05 and "*a clear majority of witnesses did not support lowering the present limit*." These witnesses believed that lowering the limit

[201] WA Office of Road Safety, 'Analysis of Road Crash Statistics: 1995 to 2004 – Western Australia (State)', at <http://www.ors.wa.gov.au/ResearchFactsStats/YearCrashStats/Pages/WesternAustralia.aspx> [accessed September 2010]

[202] Griffiths, Andrew, 'Illicit and Licit Drugs in Blood Collected from Tasmanian Motorists', November 2008, p. 131

would be unlikely to have any significant impact on reducing road crashes and that the community would not be prepared to accept a reduction.[203]

Mr Barry McDonald said reducing the limit would prevent the reasonable and responsible person from having "*an end-of-day beer with his mates*."[204] Mr Barry Oliver (Advanced Driver Techniques) said that reducing the BAC limit to zero would go too far:

> *"I think it is too draconian. I do not know that it is necessarily going to capture the people who are going to do it anyway. We have to bear in mind that, in my view, there is an element in the community who are going to continue to drink and drive irrespective."*[205]

The Committee asked Mr Paul Hogan (Chair, Road Safety Task Force) whether the BAC threshold of 0.05 in Tasmania is appropriate. Mr Hogan responded:

> *"I do not profess to be an expert in that field, but I think it is. We all know you can be under 0.05 and start to feel as though you have had a couple of drinks even without being over, so one of our things that we talk about with drink driving is that you do not have to feel drunk to be over 0.05."*[206]

The Committee and Mr Hogan discussed factors such as body size, metabolism, and varying definitions of a standard drink leading people to underestimate their BAC level.[207] The Committee asked if one of the ways of avoiding this problem would be zero tolerance. He said:

> *"I know that, but I am saying I think that is too draconian. I do not know that you need to go that far. If there was proper education about what represents a standard drink and you had consistency in what is a standard drink provided to you at the restaurants and hotels, the problems could be overcome."* [208]

Mr Andrew O'Brien (Tasmanian Ambulance Service) said:

> *"In western society I do not think it would be well tolerated. It does not even allow anyone to have one drink… so you could end up having a drink at lunchtime and driving home at 4 o'clock and at 0.01 feeling absolutely perfect but you are not and you are in strife. I do not think society would accept it at that level. Perhaps even lower than 0.05 but I do not know enough of the science to know how much impact it has."*[209]

Ms Liz de Rome (Australasian College of Road Safety) said:

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[203] PP 56 of 2010, p. 13
[204] McDonald, transcript of evidence, 15 October 2008, pp. 11-12
[205] Oliver, transcript of evidence, 22 October 2008, p. 82
[206] Hogan and Sydes, transcript of evidence, 22 October 2008, p. 61
[207] Hogan and Sydes, transcript of evidence, 22 October 2008, pp. 61-62
[208] Hogan and Sydes, transcript of evidence, 22 October 2008, p. 63. Mr Hogan also noted: "We have to be very careful that we are not quoted here outside of our portfolio, outside of our charter, because if we do that, that is not representative of the Road Safety Task Force. Some of the views that I am putting to you are consistent with my experience of being on the Road Safety Task Force but it would not be fair to say this is the policy of the taskforce."
[209] O'Brien and Morgan, transcript of evidence, 6 May 2009, pp. 83-84

> *"You don't need to drop the level beyond 0.05 because that is a level that law-abiding people can live with and stay safe. What we have to do is focus on the people who are above that and behave really badly."*[210]

Prof Max Cameron (MUARC) told the Committee that internationally, *"very few countries"* have a limit under 0.05.[211] In comparison, limits in other developed countries are:

- United State 0.08
- Canada 0.08
- New Zealand 0.08
- United Kingdom 0.08
- Europe mostly 0.05, though in some countries 0.00, 0.02 or 0.08

Mr Steve Richardson submitted to the Committee a proposition to reduce the blood alcohol content level to zero for all drivers in Tasmania,[212] his rationale being that impairment and rates of metabolism could be difficult for drivers to estimate by their own judgment:

> *"The capacity for the brain to cope with any amount of alcohol varies from day to day. It varies from individual to individual. The amount of alcohol that a person takes into their system will also vary from day to day to get to that limit. It is not a measurable risk. The driver is unable to say, 'I've had two beers this afternoon; they were light beers, so I should be right to drive home'."*[213]

An evaluation of four European countries – Hungary, Slovakia, the Czech Republic and Croatia – with zero BAC limits was unable to gauge the effectiveness of this measure due to a lack of data.[214] A study following Sweden's decision to reduce its BAC limit from 0.05 to 0.02 in the early 1990s found, through comparing pre-0.02 and post-0.02 crash data, that *"for all traffic accidents the reduction was about 7%."* However, the author noted that the results could be *"confounded by other factors"* and advised *"results should therefore be interpreted with caution."*[215]

The Committee's *Interim Report* observed that *"existing penalties for repeat offenders should be substantially increased"* and that *"drivers would be less likely to drive with a BAC in excess of 0.05 if the risk of detection were greater."*[216] The *Interim Report* also stated that in *"most cases"* a period of suspension has a *"greater impact on motorists than the monetary penalty."*[217]

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[210] McIntosh *et al*, transcript of discussion, 4 February 2009, p. 22
[211] Mitsopoulos-Rubens *et al*, transcript of discussion, 28 January 2009, pp. 37-38
[212] Richardson, submission; see also Richardson, transcript of evidence, 15 October 2008, p. 20
[213] Richardson, transcript of evidence, 15 October 2008, p. 21
[214] 'Evaluation of the 0.0 BAC Limit for Drivers of Vehicles in Czech Republic, Slovakia, Hungary and Croatia', PEPPER working paper 41, July 2008, p. 43
[215] Norstrom, Thor, 'Assessment of the Impact of the 0.02 Limit in Sweden', *Studies on Crime and Crime Prevention*
[216] p. 13
[217] p. 17

The Committee has compared penalties applicable to these types of offences in five of the Australian States current during 2009. (Relevant legislation in Queensland is formulated in a manner that does not contain a standard scale of penalties for drink-driving offences.)

Victoria[218]		
Exceed BAC:	**0.05-0.07:**	$350, 6 months disqualification or 10 points
	0.07-0.15:	$350-$491 6 to 14 months disqualification
	>0.15	Up to $2,290, 15 to 48 months disqualification. Such cases are heard by the magistrates court

New South Wales[219]		
Exceed BAC:	**0.05-0.08:**	Maximum court-imposed $1,100 fine for first offence, $2,200 second offence, or disqualification
	0.08-0.15:	Maximum court-imposed $2,200 fine, 9 months gaol and disqualification for first offence, second offence $3,300/12 months gaol/disqualification
	>0.15:	Maximum court-imposed fine $3,300, 18 months gaol and disqualification for first offence, second offence $5,500/2 years gaol/disqualification

Western Australia[220]				
Exceed BAC:	**0.05-0.06:**	$100	**0.11-0.12:**	$600+4 months
	0.06-0.07:	$100	**0.12-0.13:**	$600+5 months
	0.07-0.08:	$100	**0.13-0.14:**	$700+5 months
	0.08-0.09:	$400+3 months suspension	**0.14-0.15:**	$700+6 months
	0.09-0.1:	$500+3 months	Exceed BAC penalties increase in steep increments for second and subsequent offences.	
	0.1-0.11:	$500+4 months		

South Australia[221]	
Exceed BAC	**0.05-0.08**: $438+4 points A court hears the matter in cases involving higher BAC levels.

Tasmania[222]		
Exceed BAC:	**0.05-0.1**	$240-$1,200, 3-12 months disqualification
	0.1-0.15	$480-$2,400, 6-18 months disqualification
	>0.15	$600-$3,600, 12-36 months disqualification

In 1998 New South Wales changed its statutory penalties for drink-driving offences, essentially doubling the penalty for breaching prescribed BAC limits. An early analysis of 1997 trends (before the changes) compared to 1999 trends (after the changes) found:

[218] 'Automatic Indexation of Fees and Penalties' and 'Drink Driving', at <http://www.vicroads.vic.gov.au> [accessed October 2009]
[219] 'Drug and Alcohol Offences', at <http://www.rta.nsw.gov.au> [accessed October 2009]
[220] 'DriveSafe: A Handbook for Western Australian Road Users', appendix 3, at <http://www.transport.wa.gov.au/mediaFiles/lic_drive_safe_book_09.pdf>
[221] 'Road Safety: Road Safety Offences', at <http://www.dtei.sa.gov.au> [accessed October 2009]
[222] Road Safety (Alcohol and Drugs) Act 1970 (Tas.) s.17

- The number of prosecutions in 1999 increased 21% above 1997 levels (from 19,237 to 23,285);

- The average length of offender incarceration increased from 4.3 months to 5.1 months, the average fine imposed increased from $513.2 to $752.5 and the average period of licence disqualification imposed increased from 12.3 months to 14.3 months. In practice, however, there were penalty variances between Sydney courts and courts outside Sydney; and

- The percentage of offenders returning to court for a subsequent drink-driving offence within the next three years, when the 1997 cohort and 1999 cohort were compared, remained similar.[223]

These results show that doubling penalties in the NSW case achieved the intention of raising penalties applied to offenders, though *prima facie* had a limited effect on offending levels.

As well as detecting drivers in the act of drink-driving, alcohol interlocks are being used as a technical measure to prevent people from physically driving a vehicle with such a device installed whilst intoxicated. DIER has defined the concept of an alcohol interlock in the following terms:

> *"An alcohol interlock is a device fitted to a vehicle's ignition that measures the driver's breath for alcohol. The interlock requires the driver to provide a breath sample every time an attempt is made to start the vehicle. If alcohol is detected and the driver has a blood alcohol content (BAC) over the permitted level, the vehicle's ignition locks and the vehicle is immobilised."*[224]

George Mavroyeni (Director of Road Safety and Network Access, VicRoads) told the Committee that Victoria has been increasingly using alcohol interlocks as a means to separate people's drinking from their driving. He said the cost *"is about $1,600 to $1,700 per annum [per device] for the mandatory scheme."*[225] The Committee asked him whether interlocks were reducing recidivism. He said:

> *"We haven't done any research in that regard but, if we do it, we suspect that it would have a low impact on recidivism because the people who are drinking and driving basically have an alcohol problem, which manifests itself onto the road. There would be other measures that would be needed to help people overcome alcoholism."*[226]

Mr Lauchlan McIntosh (Australasian College of Road Safety) said:

> *"Alcohol interlocks are now almost standard in trucks in Sweden. You can't drive a truck or a bus unless you have blown into the alcohol interlock. I think*

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[223] Briscoe, Suzanne, 'The Impact of Increased Drink-Driving Penalties on Recidivism Rates in NSW', *Alcohol Studies Bulletin*, no. 5 May 2004

[224] DIER, 'Tasmania's Trial of Alcohol Interlocks: Information for Volunteer Participating Drivers', [undated], at <http://www.transport.tas.gov.au/safety/tasmanian_road_safety_strategy/alcohol_interlocks> [accessed September 2010]

[225] Healy *et al*, transcript of discussion, 27 January 2009, pp. 2-3

[226] Healy *et al*, transcript of discussion, 27 January 2009, p. 3

that we should be more active in using those technologies and encourage them."[227]

According to Sweden's Intelligent Transport Systems Strategy 2006-2009:

- "*From 2006, all lorries with a total weight above 3.5 tonnes… and are intended for more than 100 hours of use must be equipped with alcohol ignition interlocks*.

- *The S[wedish] R[oad] A[dmitration]'s own vehicles must be equipped with alcohol ignition interlocks during 2008 at the latest*."[228]

Between August 2008 and May 2009, DIER initiated a trial of alcohol interlocks in Tasmania with the assistance of volunteer participants and contracted the Tasmanian Institute of Law Enforcement Studies to conduct an ongoing assessment and evaluation of the trial. Fifteen participants were recidivist drink-drivers and the remainder were DIER employees.[229]

The main aim of the evaluation was to measure the "*effect of the installation of alcohol interlock devices on drivers from a number of perspectives*," including driver attitudes towards the devices, driving behaviours and the perceptions of family members towards participants and vice-versa.[230]

In summary, the evaluation found:

"… *The Tasmanian trial recorded relatively high satisfaction with use of the alcohol interlock device among all participants.*

In terms of technical and practical impact, the trial showed that the alcohol interlocks worked satisfactorily with only a few technical problems being identified: in particular, warm-up times and retesting.

With respect to psychological impact, overall, participants had positive views in relation to the impact of alcohol interlocks on drinking and driving and on road safety.

In terms of its social impact, the majority of participants did not find that using the alcohol interlock caused them embarrassment and, generally speaking, there appears to be a strong positive reaction by others (family, friends and workmates) to use of the interlock device.

In relation to behavioural change, the results of the Tasmanian trial reflect… that alcohol interlocks are an effective deterrent to drink-driving while they are installed in a vehicle but are unlikely to lead to a long-term behavioural change."[231]

The evaluation recommended that in-principle, "*An alcohol interlock program should be implemented in Tasmania*" for repeat offenders and high BAC

[227] McIntosh *et al*, transcript of discussion, 4 February 2009, p. 25
[228] Swedish Road Administration, 'National ITS Strategy for 2006-2009', June 2005, p. 18
[229] TILES/DIER, 'Evaluation of the Trial of Alcohol Interlocks Project (TAIP): Final Report', July 2009, p. 1
[230] TILES/DIER, 'Evaluation of the Trial of Alcohol Interlocks Project (TAIP): Final Report', July 2009, p. 10
[231] TILES/DIER, 'Evaluation of the Trial of Alcohol Interlocks Project (TAIP): Final Report', July 2009, p. 5

offenders.[232] The 2010-11 State Budget has included $430,000 to establish this program.[233]

One witness recommended to the Committee that breath-testing devices should be placed at establishments where alcohol is served. In his submission, Mr Albert Ogilvie suggested that breath testing machines should be required to be available, free of charge, "*at all establishments providing alcohol to the public*."[234] He said:

> *"That imposes a cost but it is a penalty or an offset for the profit that is made out of selling something that leads to death and injury on the roads frequently. I do not see the slightest problem in requiring the machines to be properly installed and properly maintained."*[235]

He added:

> *"I do not see any problem in requiring the publican who is supplying alcohol to require the machine to be recalibrated every six months. There would be provisions in it to protect against false readings and wrong readings, but assuming that modern science is fairly reliable and competent it would be an enormous help to anyone leaving a restaurant."* [236]

Tasmania Police, however, cautioned against the idea. The Acting Commissioner of Police said that such devices could only provide an indication for patrons unless they were properly calibrated. [237] Sgt David Sinclair (Tasmania Police) added that Police breath-testing devices "*shut down after three months*" unless calibrated whereas the calibration and accuracy of such devices available commercially "*could be anyone's guess*." [238]

In its submission, the Alcohol, Tobacco and Other Drugs Council of Tasmania Inc (ATDC Tas Inc) suggested that the effectiveness of enforcement and public education were measures needed to address drink driving.[239] The Committee asked Ms Tracey Currie (CEO, ATDC Tas Inc) to comment on diversionary options and sentence options for recidivist drink-driving offenders. She responded:

> *"I think that we should have a program that looks at repeat offenders. We need to look at educating people who are repeat offenders. We need to also look at support programs and, again, it goes back to these treatment programs that we have. Yes, with repeat offenders there is a range of things that you can do. If we want to rehabilitate someone then throwing them in jail is not going to rehabilitate people and if it gets to that point where they have had too many offences and they have to go into jail, then alongside that sits a program that looks at treating that person for that substance use disorder."*[240]

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[232] TILES/DIER, 'Evaluation of the Trial of Alcohol Interlocks Project (TAIP): Final Report', July 2009, p. 6
[233] 2010-2011 Budget Papers, 'Budget Paper No. 2: Government Services – Vol. 1', p. 6.3
[234] Ogilvie, supplemental submission, p. 9
[235] Ogilvie, transcript of evidence, 6 May 2009, p. 48
[236] Ogilvie, transcript of evidence, 6 May 2009, p. 48
[237] Hine *et al*, transcript of evidence, 6 May 2009, p. 24
[238] Hine *et al*, transcript of evidence, 6 May 2009, p. 24
[239] ATDC, submission, p. 6
[240] Currie, transcript of evidence, 6 May 2009, p. 55

The prevalence and impact of drug-affected drivers constitutes a significant problem. Drugs have been cited many dozens of times each year since 2005 as a causal factor of serious injury and fatal crashes in Tasmania. In 2000, drugs were not cited once as a causal factor, though this is probably not an accurate reflection of the relationship between drugs and road crashes in that year. As such, knowing whether drug taking and driving has been more or less prevalent in 2009 than 2000 is uncertain.[241]

The *Road Safety (Alcohol and Drugs) Amendment Act 2005* provided Tasmania Police with the authority to require drivers to undergo oral fluid tests (OFTs) and blood tests in certain circumstances. The OFTs, Tasmania Police advised, "*currently cost, on average, $50 per device*." From the 2005 financial year to the end of the 2009 financial year period, police had conducted 1,542 OFTs and 555 blood tests for drugs.[242] When compared to the number of tests for alcohol, these numbers are very small. Prof Max Cameron (MUARC) said drug tests remain expensive, which limits the number of tests police conduct:

> "*The random drug-testing situation is very like random breath testing in the 1970s in that the individual test is very expensive, and the people who recall it say that it was a similar order of magnitude. That is why in the mid-1970s and onwards the amount of random breath testing was quite low*."[243]

Drug Testing[244]					
	2005-06	2006-07	2007-08	2008-09	2009-10
Oral Fluid Tests Conducted	272	312	546	412	565
Blood Tests Directed	43	103	198	211	252
Amount expended (on OFTs)	$24,580	$25,550	$55,120	$63,500	$66,247

However, with OFT devices at around $50 each, there is a capacity (based on the figures above) to conduct a greater number of OFTs. For example, expending $63,500 in 2008-09 on tests at around $50 each in theory should have been sufficient to purchase over 1,200 devices yet only 412 OFTs were carried out.

An additional problem is the use of prescribed drugs. Mr Tony Hennessy, for instance, drew attention to drivers being impaired though the use (or misuse) of prescription drugs:

> "*I have a very serious concern about the number of people driving on the road while on prescription medication that they should not be on the road*

[241] Information provided by DIER, 17 March 2009
[242] Information provided by Tasmania Police, 5 November 2009
[243] Mitsopoulos-Rubens *et al*, transcript of discussion, 28 January 2009, p. 41
[244] Information provided by Tasmania Police, 5 November 2009; Information provided by Tasmania Police 7 September 2010

with. … They drive there because no-one says that if you are on heavy levels of Valium or whatever, you should not be driving a motor vehicle."[245]

Additionally, Ms Jacqualine Watchman submitted that sleep apnoea and prescription medication contributes to sleep-related road trauma.[246]

Where a prescription medication is involved, a review of the *Road Safety (Alcohol and Drugs) Amendment Act 2005* observed that depending on how a drug is obtained and administered can affect whether the use of that drug breaches the latter Act. Further, this may make prosecuting such cases complex:

> "*The Act does not state which party has the onus of proof with respect to medications… It appears the onus of proof remains with the prosecution, providing the defence can raise sufficient evidence as to the existence of prescriptions, medical advice and so forth. This view is based on the fact that the Act is silent about the onus of proof on this issue and yet, by contrast, specifically creates a statutory assumption about the efficacy of blood tests for prescribed illicit drugs (s.23A). Parliament's intention is not clear from Hansard*."[247]

The review recommended, amongst several other changes to the Act, that it should be "*amended to clarify the licit administration of substances*."[248]

[245] Hennessy, transcript of evidence, 22 October 2008, p. 28
[246] Watchman, submission, p. 1
[247] Prichard, Jeremy *et al*, 'Review of the Road Safety (Alcohol and Drugs) Amendment Act 2005', TILES, June 2009, p. 18
[248] Prichard, Jeremy *et al*, 'Review of the Road Safety (Alcohol and Drugs) Amendment Act 2005', TILES, June 2009, p. 4

Findings

The Committee found that –

23. The weight of evidence presented to the Committee favours retention of the 0.05 BAC level.

24. Drug-driving is becoming an increasing problem.

25. Evidence shows that young male drivers are particularly over-represented in serious casualty crashes involving alcohol.

Recommendations

The Committee recommends that –

13. Legislation and regulations be formulated to empower the courts, in appropriate cases, to require the installation of alcohol interlock devices in the vehicles of repeat drink-driving offenders.

14. The number of random drug tests be increased.

15. Third and subsequent repeat drink-driving offenders be required to undergo mandatory treatment for their alcohol abuse.

16. The age at which novice drivers be permitted to drive with a BAC above zero be raised.

17. The 0.05 BAC restriction for unrestricted drivers remain unchanged.

6 Speed

As a basic principle, the higher the speed at which a vehicle travels the greater likelihood there is of a crash occurring and that it will be more severe in terms of injury to road users. A second basic principle is that even speed within the posted limit can be excessive when road conditions change due to weather or other environmental factors.

Speed, in terms of excessive speed for the conditions and exceeding the speed limit, is among the leading crash factors police attribute to fatal and serious injury crashes in Tasmania. Crash factor statistics, however, do not discern between situations where speed was the sole or primary cause of a crash (as a result of reckless driving) and where speed was a secondary or passive cause of a crash (due to lapses or mistakes).[249] The significance of speed and occupant injury also depends on factors such as whether seatbelts were properly worn, driver frailty and the vehicle's safety features.

The graph below illustrates stopping distances corresponding to vehicle speed. The dotted line signifies that if a pedestrian is hit at a greater speed, chances of survival are less than 50% and decrease incrementally. This maxim, however, is a generalisation that would of course vary according to factors such as size, vehicle design, mass and road surface conditions.

Speed and Mean Braking Distances[250]

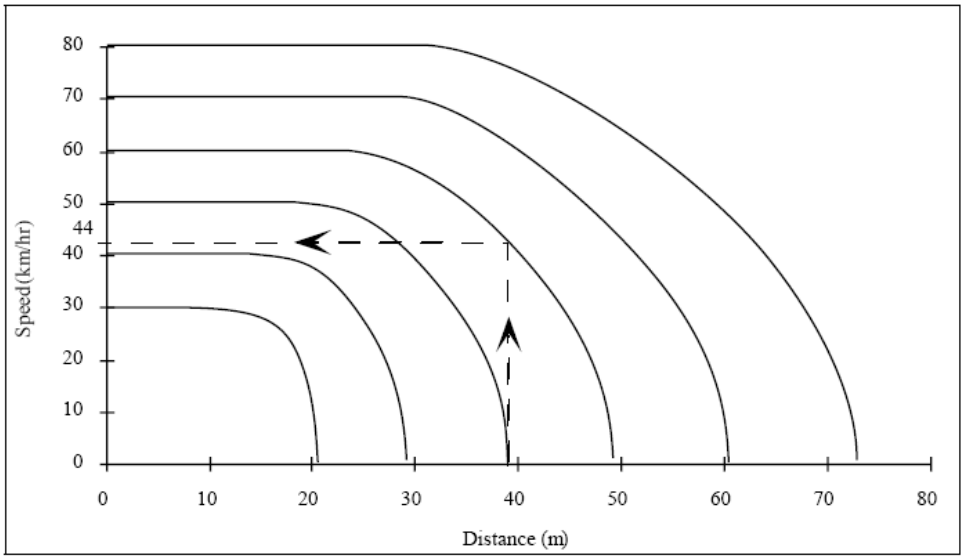

Figure 6.1 Speed versus distance for emergency braking from time = t_0

Source: Figure 6.1 in McLean *et al*, 'Vehicle Travel Speeds and the Incidence of Fatal Pedestrian Collisions'

[249] Austroads, *Balance Between Harm Reduction and Mobility in Setting Speed Limits: A Feasibility Study* (Austroads, Sydney, 2005), p. 7

[250] McLean, A J, *et al, Vehicle Travel Speeds and the Incidence of Fatal Pedestrian Collisions* (Federal Office of Road Safety, Canberra, 1994), report CR 146, p. 40

McLean *et al*, based on the calculations used to formulate the chart above, have observed that:

> "*The effect on impact speed of a difference in travelling speeds of 50 and 60 km/h can be seen in the following example, which is indicated by the intercept lines in Figure 6.1. Consider two cars travelling side by side at a given instant, one car travelling at 50 km/h and the other overtaking at 60 km/h. Suppose that a child runs onto the road at a point just beyond that at which the car travelling at 50 km/h can stop. The other car will still be travelling at 44 km/h at that point, a collision speed at which a pedestrian has more than a 50 per cent probability of being fatally injured*."[251]

In his submission, Mr Tony Hennessy described the assertion in advertisements 'If you hit me at 60 I will die but at 50 you will break my pelvis, but I will survive' as being a "*patently stupid*" statement. He wrote:

> "*Anyone who has studied physics realises that the impact is not related only to speed but rather a combination of speed and mass (i.e. the weight of the vehicle)*."[252]

The problem appears to be that the case was overstated in advertisements; whereas McLean *et al* asserted a percentage of fatality probability, the advertisements omitted this qualification. An evaluation of the 50km/h urban speed limit provided to the Committee stated:

> "*Significant casualty crash savings were noticed for the first three years after implementation, with the biggest reductions observed in 60 km/h and 50 km/h speed zones respectively. Similarly, an analysis of years 4 to 6 data suggests an overall reduction in casualty crashes. Again, the largest crash savings being realised in 60 km/h and 50 km/h speed zones*."[253]

Specifically, from 2002 to 2008, the evaluation estimated an average annual crash saving of 214 casualty crashes. However, the evaluation also noted that other factors might have influenced crash levels, and as such, "*caution should be taken in solely attributing crash savings to the introduction of the 50km/h limit*."[254] Hon Bryan Green MP, Chair of TRSC, said, however, that "*there is a good case*" to lower remaining 60km/h limit zones in urban areas to 50km/h.[255]

Ms Penny Nicholls (General Manager, Land Transport Safety, DIER) stated that there is a direct correlation between higher speeds and the risk of a crash occurring:

> "*Travel speeds just 5 kilometres above the limit in urban areas and 10km/h above in rural areas doubles the risk of a casualty crash. Even something like a 1 kilometre reduction in average speed limits leads to a 2 to 3 per cent reduction in injury crashes*."[256]

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[251] McLean, A J, *et al*, *Vehicle Travel Speeds and the Incidence of Fatal Pedestrian Collisions* (Federal Office of Road Safety, Canberra, 1994), report CR 146, p. 40
[252] Hennessy, submission, p. 22
[253] Information provided by DIER, 24 July 2009
[254] Information provided by DIER, 24 July 2009
[255] Green and Nicholls, transcript of evidence, 17 June 2009, p. 12
[256] Green and Nicholls, transcript of evidence, 17 June 2009, p. 13

"*When you are looking at death and serious injury, the big issue is the transfer of kinetic energy to the humans involved in the crashes*," Prof Max Cameron (Principal Research Fellow, Injury Analysis and Data, MUARC) told the Committee.[257] Subsequently, the Committee has attempted to investigate this issue further, particularly in the context of comparing 100km/h head-on crashes and 110km/h head-on crashes. The Committee sought available research, analysis, literature, or modelling relating to head-on collisions, in particular degrees of impact and the likelihood of occupant survivability and how these factors compare if collisions occur at a speed of 100km/h as opposed to 110km/h:

> "*Specifically, in a hypothetical scenario where two medium-sized vehicles (size ratio roughly 1:1) collide directly head-on, travelling at a) 100km/h and b) 110km/h, what would be the measurable difference in terms of a) the extent of the damage to each vehicle as a result of the impact with the other vehicle and b) the extent of the injuries to the occupant/s of each vehicle involved?*"

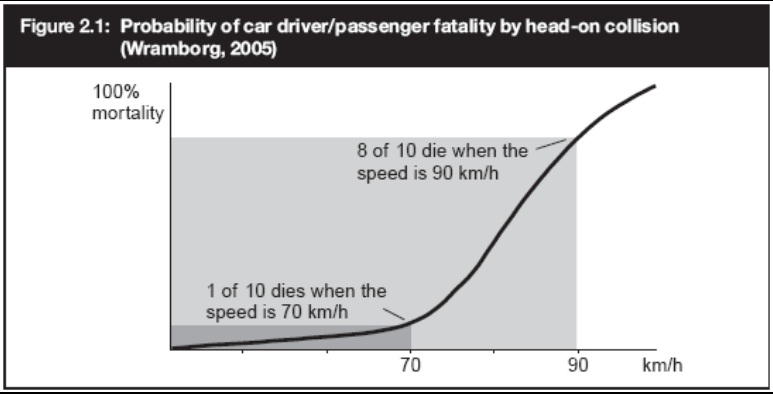
Ms Penny Nicholls (DIER) informed the Committee in response:

> "*…There is a range of literature on crash outcomes with vehicles of different mass at different speeds. However, no published material has been found that matches the Committee's specific request relating to vehicles of the same mass colliding head-on at 100km/h and 110km/h*."[258]

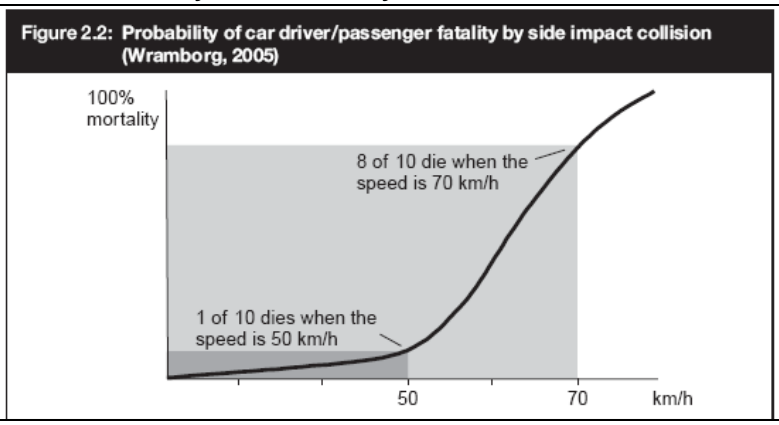
She also advised that the Department was not in a position to conduct its own modelling of such a scenario.[259] The Committee also contacted the ARRB Group and MUARC; both organisations advised the terms of the question were not straightforward and rather complex to address. Two small studies were referred to the Committee but both are limited by a high margin of error in the data used. Nevertheless, results show that, not surprisingly, the probability of mortality increases for crashes at higher speeds.

[257] Mitsopoulos-Rubens *et al*, transcript of discussion, 28 January 2009, pp. 1-2
[258] Information provided by DIER, 16 October 2009
[259] Information provided by DIER, 16 October 2009

Head-on Crash Fatality Probability[260]



Side-on Crash Fatality Probability[261]



Another study, commissioned by the UK Department for Transport, estimated that for frontal impacts, 3% of drivers would be killed at 30mph (48km/h) 19% killed at 40mph (64km/h) 65% at 50mph (80km/h) and 92% at 60mph (96km/h); for side impacts 40% of drivers would be killed at 30mph and 90% at 40mph.[262]

To assist motorists to judge distances between vehicles, the Committee notes the use of chevrons (an arrow-head road marking) painted on motorways in the UK with signs reminding drivers to travel at a distance not closer than two chevrons to the vehicle ahead.

Sweden and the Netherlands, which apply a harm minimisation approach to setting speed limits, have comparably lower speed limits on equivalent types of road compared to Australia and New Zealand, except on motorways.[263]

[260] Richards, D, and Cuerden, G, 'The Relationship Between Speed and Car Driver Injury Severity', Department for Transport, April 2009, p. 8

[261] Richards, D, and Cuerden, G, 'The Relationship Between Speed and Car Driver Injury Severity', Department for Transport, April 2009, p. 9

[262] Richards, D, and Cuerden, G, 'The Relationship Between Speed and Car Driver Injury Severity', Department for Transport, April 2009, p. 10 and 12

[263] Austroads, *Balance Between Harm Reduction and Mobility in Setting Speed Limits: A Feasibility Study* (Austroads, Sydney, 2005), p. v

Main Speed Limit (km/h)[264]			
Road Type	Sweden	Netherlands	Australasia
Local streets	30	30	50+
Other streets	50	50	60+
Undivided roads (low quality)	70	80	100
Undivided roads (good quality)	90	100	100-110
Motorways/divided roads	110	120	100-110

Dr Soames Job (Director, NSW Centre for Road Safety, RTA) stated:

> "*If you look around the world – and there are numerous studies to say this – you will see that where you put speed limits up, crash rates go up; where you put speed limits down, crash rates go down; where you increase the enforcement on speed, crash rates go down; where you reduce the tolerance at which you are enforcing speed, crash rates go down. In Australia the experience certainly supports that*."[265]

He also said:

> "*What we do know is that if you reduce speeds you get more road safety. It is really a public policy decision as to at what point you are going to make a cut and say okay, this is the minimum speed at which it is acceptable for us to have our mobility maintained*."[266]

The approach taken when setting speed limits on Tasmanian roads, as explained to the Committee by Mr Shane Gregory (Acting Director of Traffic Infrastructure, DIER), is "*all about getting the correct blend of safety and efficiency*." He said decisions are taken within the context of the speed environment, which takes into account such variables as levels of development along the roadside, the function of the road, pedestrian numbers, and the appearance of crash "*clusters*". He stated that in setting speed limits, "*we always err on the side of safety*" at the expense of efficiency.[267] Whilst in theory DIER's approach to setting speed limits is consistent and proper, in practice implementation has been reactionary and inconsistent. When questioning Mr Gregory, the Committee cited instances where essentially similar sections of road in Tasmania have had different speed limits applied. Mr Gregory conceded: "*we would not suggest that we have absolute consistency*." He explained:

> "*We do not sit down and review speed limits on every section of road on a regular basis. They are reviewed as an issue comes to light or as we are asked to consider them. The task of sitting down and reviewing the speed limit on every section of road in Tasmania would just be unachievable so we tend to respond in looking at statistics, clusters, requests and so on, so over*

[264] Austroads, *Balance Between Harm Reduction and Mobility in Setting Speed Limits: A Feasibility Study* (Austroads, Sydney, 2005), p. v
[265] Job and Elliott, transcript of discussion, 2 February 2009, p. 7
[266] Job and Elliott, transcript of discussion, 2 February 2009, p. 8
[267] Hubble and Gregory, transcript of evidence, 28 August 2009, pp. 1-2

a period of time there can be inconsistencies and we would hope that again over time we would eliminate those inconsistencies."[268]

An Austroads report on the subject of speed limits has recognised five main approaches that might be taken to setting speed limits:

- "*Engineering – whereby information is collected on the traffic speeds, crash data, type and amount of roadside development, road geometry, and the number and type of road users, to allow engineers to designate a road speed*;"

- *Driver's choice – whereby it is left up to drivers to determine a reasonable and safe travel speed, with the 85th percentile driving speed commonly providing the posted limit*;

- *Economic optimisation – in practice, a collection of approaches whereby dollar values are set to all the costs associated with travel and to the burden of injury and death from motor vehicle crashes. The posted speed limit becomes that speed which provides the minimal total cost*;

- *Harm minimisation – whereas economic optimisation approaches assume that it is legitimate to put a fiscal cost on human trauma, these approaches commonly contend that life and health cannot be measured or traded in terms of monetary costs. Rather, they aim to create transport systems that do not accept fatalities or other serious injuries as an inevitable cost of mobility*;

- *'Expert systems' – computer programs employing decision rules operating off a well-defined knowledge base relating to road conditions, to generate speed recommendations. …* "[269]

The Committee was advised, however, that in practice setting speed limits can be a balance between safety and the weight of community opinion opposed to reduced limits. Mr Gary Liddle (CEO, VicRoads) said:

> "*The question is whether the community will accept it and it is always finding that balance between community acceptance and road safety outcomes*."[270]

Indeed, some witnesses appearing before this Committee argued or suggested that lowering speed limits would not have a road safety benefit.

Dr David Brown referred the Committee to a review of speed limits in the Canadian province of British Columbia.[271] The report *inter alia* found that provided a basic speed law is enacted, "*consideration should be given to eliminating the posted speed limits*" on some low traffic volume roads in rural areas. Nevertheless, a basic speed law would require a motorist to "*drive at a*

[268] Hubble and Gregory, transcript of evidence, 28 August 2009, pp. 7-8
[269] Austroads, *Balance Between Harm Reduction and Mobility in Setting Speed Limits: A Feasibility Study* (Austroads, Sydney, 2005), pp. i-ii
[270] Healy *et al*, transcript of discussion, 27 January 2009, p. 36
[271] Brown, transcript of evidence, 26 March 2009, p. 114

speed that is reasonable and prudent for existing conditions."[272] Sgt Michael Davis (Tasmania Police Northern District Accident Investigation Section) said a reduction to 100km/h is not necessary:

> "*In my view, 110 km/h is adequate for a highway. I read in the paper where the speed was considered to be dropped to 100km/h but my view is that if you are driving from Burnie to Hobart at 100km/h you get frustrated drivers. At 110km/h it is a safe speed that you can move along at. You have to look at it in metres per second that a vehicle will travel at, at 100km/h, which is roughly about 25 metres per second to calculate a stopping distance. My view is I do not think anything would be achieved by dropping it to 100 km/h on a highway that should be safe*."[273]

Mr James Nicholson (State Secretary, AIAM (Tas)) did not support a reduction:

> "*To me, 110 back to 100 is marginal, nit-picking, fiddling around the edges. … If someone is going to speed at 150 km/h they are not going to care whether it is 110 speed limit or a 100 speed limit. Someone who does not want to do 110 will do 100 on the open road anyway*."[274]

The Committee asked Mr Paul Hogan (Chair, RSTF) whether the 110km/h speed limit on designated roads in Tasmania should be reduced to 100km/h. He said:

> "*I don't think it is impractical. And I take Paul [Harriss]'s point, 'Who cares. Just do it', if the Government has the will to do that. My preference would be to see a reduction in the speed tolerances on the cameras that we currently use*."[275]

Mr Will Hagon (radio journalist) said that if speed limits were generally reduced, this would lead to a greater number of vehicles travelling on roads at the same time, more fatigue-related crashes, and a tendency for drivers to exceed speed limits on roads where law enforcement is sparse. [276]

The Committee asked Dr Soames Job (RTA) whether there is validity in arguments put forward suggesting that lower speeds induce fatigue on drivers. He said there is a "*resplendent body of evidence*" indicating that lower speed limits improve road safety.[277] Mr Jim Langford (Senior Research Fellow, Behavioural Safety Science, MUARC) said that the argument advocating higher speeds to avoid fatigue is "*an argument somewhat akin to if you sprint a marathon you are not going to get tired*".[278]

Tasmania Police Acting Commissioner Hine said any decision to reduce speeds is for the community and government and "*whatever the speed limit is, we will enforce it*". [279]

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[272] Wade Trim/British Columbia Ministry of Transportation, 'A Review and Analysis of Posted Speed Limits and Speed Limit Setting Practices in British Columbia', Spring 2003, pp. vii-viii and p. ix
[273] Davis, transcript of evidence, 7 May 2009, p. 20
[274] Nicholson, transcript of evidence, 14 October 2008, p. 81
[275] Hogan and Sydes, transcript of evidence, 22 October 2008, p. 60
[276] Hagon, transcript of discussion, 2 February 2009, pp. 7-8
[277] Job and Elliott, transcript of discussion, 2 February 2009, pp. 11-12
[278] Mitsopoulos-Rubens *et al*, transcript of discussion, 28 January 2009, p. 16
[279] Hine *et al*, transcript of evidence, 6 May 2009, p. 32

Ms Angela Conway (Manager, Land Transport Safety Policy, DIER) briefed the Committee on default speed limit trials in the Kingborough and Tasman municipalities, which has involved lowering the default rural limit from 100km/h to 90km/h on sealed roads and from 100km/h to 80km/h on unsealed roads. She said:

> "*Both of these, I would say, have been driven from the community. We have community road safety partnership programs and through those local programs we got some feedback that they wanted to focus on the area of speed. This was something that was developed as a very important trial that we could look at and see how it was received by the community and also to see what it actually does to behaviour and the crash outcomes*."[280]

Incidentally, Mr McIlfatrick said his Department was considering a voluntary speed limit for its staff:

> "*Our current draft policy internally which we are close to signing off, suggests – and I will probably be sorry I said this – that we have a voluntary speed limit of 100 kilometres an hour on any road including the Midland Highway and that on any rural road we have 90*."[281]

Roadworks Sites

The Committee has been concerned that imposing temporary speed limits whilst roadworks sites are non-operational leads to some drivers generally disregarding such signage.

The Committee asked Mr Norm McIlfatrick (DIER) on what basis speed reductions are determined at roadworks sites, in light of Members' experiences where face value inconsistencies have been apparent. He said this is "*determined by a risk assessment process*" and contractors have to erect safety notices in accordance with that assessment.[282]

The Committee suggested to Mr McIlfatrick that contractor compliance in the area of signage has been an issue. In particular, the placement of roadworks signs and cases where temporary speed limit signs had not been removed when roadworks operations had periodically ceased. He said DIER monitors contractor compliance according to the terms agreed with the Department. "*Our road network managers would supervise that those regimes are in place*," he said.[283] He added:

> "*Part of the assessment of the letting of the contract would be their safety management capability; part of the conditions of the contract would be having that capability and implementing it*."[284]

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[280] McIlfatrick *et al*, transcript of evidence, 26 March 2009, p. 23
[281] McIlfatrick *et al*, transcript of evidence, 26 March 2009, p. 57
[282] McIlfatrick *et al*, transcript of evidence, 26 March 2009, p. 13
[283] McIlfatrick *et al*, transcript of evidence, 26 March 2009, p. 14
[284] McIlfatrick *et al*, transcript of evidence, 26 March 2009, p. 14

There is anecdotal evidence that this policy is being breached on a regular basis and there is no evidence of this policy being adequately enforced.

The Committee suggested to Mr McIlfatrick that signage is not being properly monitored in every instance and this was leading to drivers having a lack of respect for signage at roadworks sites. In response, Mr McIlfatrick said:

> "*I would agree that it needs constant vigilance. The amount of roadworks that are occurring at the moment is significant so all I can say is we use our best endeavours to apply the rules.*"[285]

He later emphasised that "*this is receiving our attention*" and that the Department has conveyed to its contractors the need for "*better vigilance*" in this area. Mr McIlfatrick said that leaving signs in place is better than not having signs in place and agreed that a situation where these signs are ignored is undesirable. [286]

The Committee notes the absence of any apparent penalty in the event roadworks signs, and those showing temporary speed limits, are not promptly removed, covered or dismantled during non-operational times.

Use of Variable Speed Limit (VSL) Signage

Witnesses informed the Committee that electronic signs make it possible to vary speed limits during certain times of the day or according to traffic flows, thereby providing greater flexibility between safety and mobility as required.

In practice this would allow speed limits on particular lengths of road to be reduced when temporary safety issues arise: during adverse weather, a traffic hazard such as a broken down vehicle or a major public event. Conversely, at times when traffic volumes are low, roadside activity is non-existent and non-adverse weather conditions prevail, the speed limit could be raised.

DIER, for example, has been installing electronic signage at school zones that illuminates a special speed limit during times when children are arriving and departing.[287] The Committee applauds this action.

The Committee visited the NSW Road and Traffic Authority's Traffic Management Centre (TMC) in Sydney and viewed first-hand how the TMC programmes and updates VSL signs and provides real-time information on road conditions to motorists through strategically placed electronic message boards.[288]

Mr Keith Midson said that having consistent traffic speeds on busy roads reduces crashes. He suggested, as an example, that a road could have a speed limit of

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[285] McIlfatrick *et al*, transcript of evidence, 26 March 2009, p. 15
[286] McIlfatrick *et al*, transcript of evidence, 26 March 2009, p. 16
[287] McIlfatrick *et al*, transcript of evidence, 26 March 2009, p. 22
[288] RTA, 'Hands on Control: New South Wales' Transport Management Centre', 2005, pp. 10-11 (document NSW.d1)

100km/h at non-peak times and 60km/h limit at peak times to ensure consistency of traffic flow.[289]

The concept of VSL has been subject to inquiry by the House of Representatives Standing Committee on Transport and Regional Services as part of a more general inquiry into intelligent transport systems. That Committee noted in its report:

> "*Experience abroad indicates that on congested roads VSL can have a beneficial effect on traffic flow and safety. On the M25 in England, speed limits were adjusted in response to the level of congestion. ... [A] study found that motorists were more inclined to keep to their lane when a 'faster lane' no longer existed. They were also more inclined to keep to the inside lane and to keep proper distances between successive vehicles, resulting in smoother traffic flow which actually increased average travel times of traffic. Results show that traffic accidents decreased by 28 per cent during the 18 months of operation*."[290]

Notwithstanding such a case where efficiency and safety benefits had been found, the report observed that "*widespread application of VSL across the country is unlikely to be a prudent use of taxpayer funds*" unless the cost of electronic message signs could be "*drastically reduced*",[291] as the price range per unit ranged from $9,000 up to $130,000.[292] The Committee did recommend in favour of VSL signage for selected arterial roads, depending on demonstrated need, the existing quality of the road, the arterial nature of the road and cost-benefit analysis.[293]

Whilst the cost of technology tends to reduce over time, the expense of electronic signage may remain prohibitive to introducing it widely but could be feasible if targeted in the right locations in Tasmania.

[289] Midson, transcript of evidence, 27 March 2009, p. 38

[290] House of Representatives Standing Committee on Transport and Regional Services, 'Moving on Intelligent Transport Systems', December 2002, pp. 25-26

[291] House of Representatives Standing Committee on Transport and Regional Services, 'Moving on Intelligent Transport Systems', December 2002, p. 28

[292] House of Representatives Standing Committee on Transport and Regional Services, 'Moving on Intelligent Transport Systems', December 2002, p. 29

[293] House of Representatives Standing Committee on Transport and Regional Services, 'Moving on Intelligent Transport Systems', December 2002, pp. 31-32

Findings

The Committee found that –

26. Contractors have regularly failed to ensure temporary speed limit signs at roadworks sites are appropriately and effectively used, in compliance with regulations and other requirements, and removed at the conclusion of works.

27. There are surprising inconsistencies in the setting of speed limits in some locations in Tasmania.

28. Variable speed limit technology and electronic signage are effective road safety measures.

29. The majority of the Tasmanian highway network is unsuitable for a speed limit of 110km/h.

Recommendations

The Committee recommends that –

18. All Tasmanian highways that are not divided, dual carriageway, with run-off road protection and, where necessary, central barriers should have a maximum speed limit of 100km/h, unless independent expert advice from a body such as the ARRB Group or MUARC determines that a speed limit of 110km/h is appropriate.

19. The State Government and DIER review the maximum speed limit for heavy vehicles using major Tasmanian highways.

20. There be a penalty imposed on contractors or other persons who are responsible for failing to comply with regulations and other requirements, and who fail to remove speed limit signs at the conclusion of roadworks.

21. Variable speed limit signage be used more extensively.

7 Mobile Phones

As at 2009, the use of a mobile phone in a vehicle in Tasmania has been prohibited outside the terms of s.300 of the *Road Rules 2009*. According to s.300 of the *Road Rules 2009*:

> 1) The driver of a vehicle must not use a mobile phone while the vehicle is moving, or is stationary but not parked, unless –
> (a) the phone is being used to make or receive a phone call (other than a text message, video message, email or similar communication) and the body of the phone –
> (i) is secured in a mounting affixed to the vehicle while being so used; or
> (ii) is not secured in a mounting affixed to the vehicle and is not being held by the driver, and the use of the phone does not require the driver, at any time while using it, to press any thing on the body of the phone or to otherwise manipulate any part of the body of the phone; or
> (b) the vehicle is an emergency vehicle or a police vehicle; or
> (c) the driver is exempt from this rule under another law of this jurisdiction.[294]

This change occurred in accordance with an amendment to the *Australian Road Rules*, which States and Territories replicate in their own law.[295] As such, the wording shown above would be consistent nationally.

Dr Soames Job (Director, NSW Centre for Road Safety, RTA) gave a concise but straightforward explanation for the Committee in relation to how mobile phones distract drivers:

> "*First, the evidence suggests that a great deal of the disbenefit to driver capacity that arises from telephone conversations is not to do with the hand being away from the steering wheel. That is no different than if you are changing gears. What is different is the cognitive demand on you to conduct the conversation and it is a cognitive demand which is potentially distracting. It seems that the reasonable response to that is to say, 'Well, that's the same as talking to a passenger'. But, oddly, it isn't because most passengers will be aware that a driver simply stops talking when coming to a more complex situation, the person in the car understands whereas the person on the other end of the telephone does not. There is more demand in a telephone conversation to keep the conversation going, to maintain your awareness of it and your attention to it, despite the complexity of the driving situation you face. I think that is one of the key reasons mobile telephones create a problem*."[296]

Such types of distraction are of course not limited to mobile phones. As Mr Robin Eccles (President, ADTA (Tas)) said, vehicles have become "*entertainment systems*", with mobile phones, music players, and navigation systems creating a dangerous and lethal level of driver distraction.[297] The Committee notes that

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[294] *Road Rules 2009* (Tas.) (SR 2009, No. 142), s.300
[295] *National Transport Commission (Model Amendments Regulations: Australian Road Rules – Package No. 8) Regulations 2009* (Cth.)
[296] Job and Elliott, transcript of discussion, 2 February 2009, p. 17
[297] Eccles, transcript of evidence, 14 October 2008, p. 43

apart from being covered under a general law relating to driving whilst distracted, other portable electronic devices are not singled out in legislation in the same way as mobile phones.

The Committee was advised that a ban on mobile phones would have a road safety benefit, however, this could be problematic to enforce.[298] Dr David Logan (MUARC) intimated that an alternative could be for employers to ban employees from using phones in cars on the grounds of occupational health and safety.[299]

Notwithstanding these views, among Tasmanian fatal and serious injury crash factor statistics use of a mobile phone has been cited as a crash factor only nine times over the last ten years; in contrast some other factors have been cited many more times over the same period (see Chapter 3).

The Committee asked Mr Lance Balcombe (Hydro Tasmania) whether the company has a policy of 'engine on, phone off'. "*I would say we are not quite there*," he responded. When asked whether a move in this direction was likely, he said: "*Yes, I think we will*," adding that the company also has rules for the use of trunk mobile radios.[300] In submissions provided to the Committee, Aurora and Transend Networks made no comment in relation to their policies surrounding employees' use of mobile phones or radios in company vehicles.[301]

The Victorian Parliament Road Safety Committee conducted an inquiry into driver distraction in 2006. In relation to mobile phones, its report stated:

> "*There is a need to determine the prevalence of both hand-held and hands-free mobile phone use by drivers in Victoria and to examine the effects of various aspects of mobile phone use on driving performance. Road safety authorities need to improve crash data systems on mobile phone use, including type of device and the context in which it was being used when the crash occurred. Ways of improving mobile phone technology in vehicles should be explored before giving any consideration to banning all use of phones in vehicles. The State Government need to work with the vehicle industry to encourage development of safer in-car mobile phone technology including integrated speech-controlled phone communication systems*."[302]

The Victorian committee's report did not recommend prohibiting the use of mobile phones in vehicles.[303]

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[298] Mitsopoulos-Rubens *et al*, transcript of discussion, 28 January 2009, p. 21
[299] Mitsopoulos-Rubens *et al*, transcript of discussion, 28 January 2009, p. 22
[300] Balcombe, transcript of evidence, 26 March 2009, p. 86
[301] Aurora, submission; Transend, submission
[302] Parliament of Victoria Road Safety Committee, *Inquiry into Driver Distraction* (Parliament of Victoria, Melbourne, 2006), Parliamentary Paper No. 209, Session 2003-06 (VIC.d33), p. ix
[303] Parliament of Victoria Road Safety Committee, *Inquiry into Driver Distraction* (Parliament of Victoria, Melbourne, 2006), Parliamentary Paper No. 209, Session 2003-06 (VIC.d33), pp. xiii-xiv

Findings

The Committee found that –

30. Mobile phones have become another distraction that has the potential to adversely impact on safe driving.

31. The latest amendment to the *Road Rules* relating to mobile phone use in vehicles is intended to improve safety.

32. Additional research is needed to ascertain the extent of driving impairment caused by mobile phone use, the use of other similar devices capable of distracting drivers (such as MP3 players) and whether hands-free usage is necessarily safe.

Recommendations

The Committee recommends that –

22. Due to the dangers of using mobile phones whilst driving, new provisions in the *Road Rules* and the associated penalties be regularly reinforced through public awareness campaigns.

23. Additional research be undertaken to ascertain the extent of driving impairment caused by mobile phone use, the use of other similar devices in vehicles (such as MP3 players) and whether hands-free usage is necessarily safe.

8 Occupational Road Safety

Occupational road safety essentially refers to situations where employees are required to travel in a vehicle as part of their employment duties. As the purpose of journey is not presently recorded in Tasmanian road crash data, ascertaining the proportion of occupational road crashes among all road crashes has not been possible. Measuring the scale of occupation-related travel and crashes would be complicated by cases where vehicles are driven both privately and for business. Mr Gary Myors (Motorsafe Tasmania) said driving for employment purposes is an occupational health and safety (OH&S) issue:

> "*Drivers of work vehicles should be assisted by their employers to undergo responsive and crash-free driver training under OH&S regulations. A vehicle provided by a company is basically your workplace. If you rock up with a licence in most jobs and they want you to go somewhere in the company car there's no 'are you a good driver?' or 'how many points have you got?' or whatever, it's 'can you drive?' and 'here's the car'. When people are sent out of their workplace in a company vehicle they should have the skills to drive a vehicle that they've never driven before. A lot of people drive one car and then they're expected to jump in and out of various cars, particularly things like four-wheel drives*."[304]

Mr Sam Cawthorn, seriously injured due to a road crash whilst commuting a long distance over a number of hours for work purposes, told the Committee:

> "*I am based in Launceston and I might have a meeting in St Helens one day. The next day could be Queenstown, back to Launceston. The next day could be Burnie, back to Launceston. Sometimes I would stay overnight, sometimes I would not. We all know what Tasmanian roads are like. Obviously, between the main centres it is okay, but when you start getting away from the main centres they are smaller roads. When you are doing so many kilometres I think that is a real issue. I think that there should be some type of restriction or even a cap. We were talking about truck drivers. I know people doing more kilometres than truck drivers, yet they are sales reps or people in similar roles to me. How come there is a cap on truckies but there is not for normal, everyday people?*"[305]

He also said:

> "*Unfortunately, the time I fell asleep a truck happened to be coming along in the other direction. I suppose for me if there is a way that we can make companies responsible and say they should not place so much a demand on their staff to do this number of kilometres.*"[306]

The UK Department for Transport has commissioned a study to ascertain whether employment-related driving carries a higher risk than travel unrelated to work. Using a survey method and comparing a sample against whole-of-population trends, it found drivers who drove more than 80 per cent of all their annual mileage on work-related journeys had "*about 53% more injury accidents*

[304] Myors, transcript of evidence, 15 October 2008, p. 34
[305] Cawthorn, transcript of evidence, 25 March 2009, pp. 84-85
[306] Cawthorn, transcript of evidence, 25 March 2009, p. 85

than otherwise similar drivers who did no work-related mileage."[307] The study also surveyed participants (through self-reporting) in relation to behavioural issues, asking how frequently the respondent would drive in certain situations, such as when tired or under pressure.[308] The results broadly found:

> *"…the highest risk drivers (those with very high proportions of work-related mileage) drove more often:*
>
> - *In situations known to make drivers susceptible to fatigue and drowsiness, e.g. driving on long journeys (more than 50 miles) after a full day's work;*
> - *When under time-pressure to reach a destination; and*
> - *When conducting potentially distracting in-car tasks such as mobile phone conversations, eating and drinking."*[309]

The Committee requested Aurora Energy, Hydro Tasmania and Transend Networks to provide information relating to practices for managing the safety of their employees travelling on the roads.

Transend Networks and Aurora Energy advised the Committee that they have offered their staff the opportunity to attend the Crash Free Driver program.[310] Mr Lance Balcombe (General Manager, Strategy and Finance, Hydro Tasmania) said staff are required to consider options not involving travel if available, such as holding meetings by videoconference, to reduce exposure to the risks of road travel.[311] He said Hydro Tasmania had replicated decisions at Forestry Tasmania and Aurora Energy, stating:

> *"Their qualitative evidence was that, following the driver training, their number of incidents reduced and then as they came back, as that training had sunk in and got further away from people's minds the number of incidents started to increase again. We thought that was strong enough evidence for us to actually implement something ourselves."*[312]

In its submission, Aurora Energy stated that when driving vehicles, its employees are required to adhere to organisational standards, commenting that the "*influences of alcohol, drugs and fatigue from driving and working long hours can expose employees and members of the public to significant risk*".[313]

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[307] Broughton, J, *et al*, 'Work-Related Road Accidents', TRL/Department for Transport, TRL582, p. 1
[308] Broughton, J, *et al*, 'Work-Related Road Accidents', TRL/Department for Transport, TRL582, pp. 18-19
[309] Broughton, J, *et al*, 'Work-Related Road Accidents', TRL/Department for Transport, TRL582, p. 1
[310] Transend, submission; Aurora Energy, submission p. 2
[311] Balcombe, transcript of evidence, 26 March 2009, p. 84
[312] Balcombe, transcript of evidence, 26 March 2009, p. 87
[313] Aurora Energy, submission, p. 3

Findings

The Committee found that –

33. Road safety is an occupational health and safety issue for employers and employees.

34. Road safety is not consistently included in workplace safety management plans.

35. Where employees are required to travel in a motor vehicle in the course of their duties road safety must form an integral part of a workplace safety management plan.

Recommendations

The Committee recommends that –

24. A workplace safety management plan must include provisions relating to motor vehicle travel where employees are required to drive a vehicle in the course of their duties.

25. Fatigue management policies be implemented by employers of employees who are required to drive light vehicles in the course of their duties in a manner similar to the law relating to heavy vehicles.

9 Heavy Vehicles

The 'Tasmanian Heavy Vehicle Safety Code' provides normative direction for operators in areas not necessarily required by legislation or regulation, though notes where the law does apply.

Managing Fatigue

Since December 2004 in Tasmania, maximum driving and working hours for heavy vehicle drivers (bus or truck over 12GRM) have been prescribed by Regulation. The *Vehicle and Traffic (Vehicle Operations) Regulations 2001* (as amended) require:

- Aggregate work and driving activity not in excess of:
    - 5 hours in a 5 hour and 30 minute period
    - 12 hours driving within 14 hours of work in a 24 hour period (work time includes a maximum 12 hours driving);
    - 72 hours driving or working in 7 days.
- Minimum rest periods:
    - A rest break of at least 30 minutes must have been taken before the completion of 5 hours and 30 minutes. These 30 minutes can be broken up into 2 x 15 minute blocks;
    - 10 hours in the immediately preceding 24 hours including continuous period of 6 hours not in or on the truck;
    - 96 hours in the preceding 168 hours including one continuous period of 24 hours not in or on the truck.[314]

The regulations require drivers (whether local or interstate) to maintain a logbook ("*Driving Hours Record*").[315]

Underrun Protection

One submission in particular called for "*action*" in relation to underrun protection.[316] A MUARC report specifically examining the issue of underrun stated:

> "*Underrun has two major effects on the outcome of crashes:*

[314] *Vehicle and Traffic (Vehicle Operations) Regulations 2001* (Tas); DIER, 'Driver Fatigue – Heavy Vehicle Industry', at <http://www.transport.tas.gov.au/safety/heavy_vehicle_safety/driver_fatigue_-_heavy_vehicle_industry2> [accessed September 2010]

[315] *Vehicle and Traffic (Vehicle Operations) Regulations 2001* (Tas)

[316] Nothrop, submission

- *Underrun can expose light vehicle occupants to direct contact with rigid structural parts of the vehicle before the light vehicle's crashworthiness has fully come into play; and*

- *Components of the heavy vehicle (steer axle, other axles, braking components etc) can be compromised to the degree that the vehicle is not controllable in coming to a stop, or the vehicle cannot be moved after the collision."*[317]

Front, side and rear underrun measurements are determined by the Australian Design Rules rather than State legislation or regulation. Underrun protection, nevertheless, is one among numerous suggestions contained in the voluntary 'Tasmanian Heavy Vehicle Safety Code' to increase safety through improved vehicle design.[318]

Mr Errol Nothrop proposed in his submission that front underrun protection bars be installed on trucks over six metres in length prior to delivery and sale. He added that the Government could encourage truck drivers to fit the devices to the existing truck fleet by subsidising the cost.[319]

Rollover Crashes

The Committee has been particularly concerned with the number and frequency of heavy vehicle rollover crashes in Tasmania. A 2005 report commissioned by DIER has analysed truck crashes and rollover crashes in Tasmania. The report examined a sample of truck crashes from January 2002 to March 2005, finding 78 (or 16.3%) were rollover crashes. It found, within this number, that log trucks, woodchip trucks and stock trucks have a higher propensity to be involved in rollover crashes.[320] The report also observed:

> "*Overall it appears that Tasmania has a slightly higher per capita fatal road crash rate than three neighbouring Australian states reviewed. Its heavy vehicle-involved fatality rate per 100 million vehicle kilometres is similar to these states but the proportion of fatal crashes involving a heavy vehicle is lower. Thus the safety performance of heavy trucks in Tasmania relative to the overall level of road safety is certainly no worse than the other Australian states analysed and possibly is slightly better.*"[321]

The Committee sought statistics from DIER pertaining to heavy vehicle crashes and heavy vehicle rollover crashes in Tasmania. The numbers show that from 2005 to 2009, heavy vehicle rollover crashes have been occurring at a rate of about two per month.

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[317] Lambert, John, and Richnitzer, George, 'Review of Truck Safety: Stage 1: Front, Side and Rear Underrun Protection', MUARC, April 2002, report 194, p. ix

[318] DIER, 'Tasmanian Heavy Vehicle Safety Code', November 2008, p. 21

[319] Nothrop, submission, p. 4

[320] De Pont, John, 'An Assessment of Heavy Truck Safety in Tasmania', Transport Engineering Research New Zealand Limited, July 2005, p. 45

[321] De Pont, John, 'An Assessment of Heavy Truck Safety in Tasmania', Transport Engineering Research New Zealand Limited, July 2005, p. 44

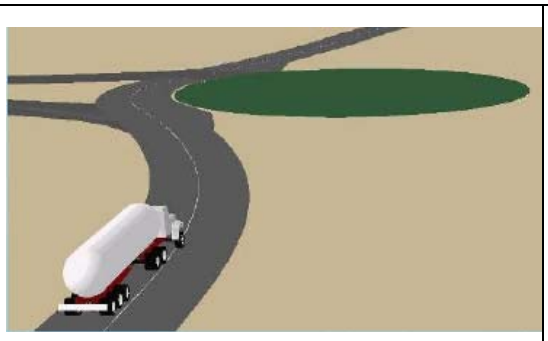
Heavy Vehicle Crashes, Tasmania, 2005-2009[322]						
	2005	**2006**	**2007**	**2008**	**2009**	**Totals**
All Heavy Vehicle Crashes by Severity						
Fatal	7	9	5	9	12	42
Serious Injury	28	20	20	13	17	98
Minor Injury	74	65	72	70	66	347
First Aid	17	22	20	28	20	107
Property Damage	359	302	321	392	378	1,752
Unknown	20	19	31	24	21	115
Totals	505	437	469	536	514	**2,461**
Heavy Vehicle Rollover Crashes						
Fatal	0	2	2	1	4	9
Serious Injury	3	1	4	3	3	14
Minor Injury	11	4	7	10	11	43
First Aid	2	1	0	2	2	7
Property Damage	9	5	10	16	14	54
Unknown	0	0	0	0	0	0
Totals	25	13	23	32	34	**127**
Heavy Vehicle Rollover Crashes by Type						
Rigid Truck	0	1	4	6	3	14
Truck and dog trailer	1	0	8	6	6	21
Semi Trailer	9	6	10	16	16	57
B-Double	0	1	0	4	4	9
Unknown	15	5	1	0	5	26
Totals	25	13	23	32	34	127
Heavy Vehicle Rollovers Where Vehicle was Laden						
Rigid Truck	0	0	4	5	3	12
Truck and dog trailer	1	0	7	5	6	19
Semi Trailer	8	6	10	16	16	56
B-Double	0	1	0	4	4	9
Unknown	10	5	1	0	4	20
Totals	19	12	22	30	33	**116**
Heavy Vehicle Rollover Crashes Where Vehicle was Laden by Load Type						
Container	0	1	2	3	3	9
General Freight	0	0	0	3	3	6
Livestock	1	1	1	1	1	5
Logs	9	5	6	10	10	40
Quarry Products	1	0	3	4	2	10
Tanker	0	0	1	1	2	4
Woodchips	1	0	2	2	1	6
Other	4	4	5	6	10	29
Unknown	3	1	2	0	1	7
Totals	19	12	22	30	33	116

The Committee received a briefing from the team leader of the Heavy Vehicles Group of ARRB Group, Mr Anthony Germanchev. The Heavy Vehicles Group provides services in the areas of vehicle safety assessments (through vehicle testing, and vehicle modelling and simulation), route assessment to identify

[322] Information provided by DIER, 31 August 2010

potential rollover locations, and incident investigation and crash reconstruction.[323] Mr Germanchev said:

> "*We will perform a survey of the area where the rollover occurred – that is a drawing of the roundabout – create the model of both the vehicle and the road and put them together and we can simulate them at different speeds travelling through that roundabout. The first take here is at 40 km/h and you can see the vehicle taking a strange path there off to the side of the road. It was identified in the site investigation that that kerb that had broken was crashed into, so that was the path that the vehicle took. So we knew the path, we knew the geometry, we knew the vehicle but we did not know the speed that caused the rollover so that is what we are finding out here.*"[324]

Truck Rollover Simulation	
	
Source: Germanchev, Anthony 'Heavy Vehicles Group Capability' (PowerPoint presentation) (Document VIC.d36)	

Mr Germanchev also explained the route assessment process:

> "*We have a vehicle with lasers fitted to the front and cameras to survey that road section. We then create a model of that road, a model of the vehicle, and simulate the two running together. So the vehicles are now running on an actual road that we have measured. We do this to identify high-risk areas on that road network. It may be a fault due to the high radius of curvature or potholes or rutting or something like that.*"[325]

Mr Germanchev also said that ARRB has conducted studies relating to log trucks.[326]

The Committee asked Mr Norm McIlfatrick (Secretary, DIER) to comment on Tasmania's lack of utilisation of ARRB's investigatory and monitoring instruments for heavy vehicles. He said:

> "*Every major crash is investigated so if there was a tool that could be used I am sure we have considered it. I think, again for the future, there is a lot of technology emerging which would are basically intelligence programs which*

[323] Germanchev, Anthony 'Heavy Vehicles Group Capability' (PowerPoint presentation) (Document VIC.d36)
[324] Cairney *et al*, transcript of discussion, 28 January 2009, p. 3
[325] Cairney *et al*, transcript of discussion, 28 January 2009, p. 2
[326] Cairney *et al*, transcript of discussion, 28 January 2009, p. 5

have helped the heavy freight operators if we are talking about trucks general. We are seeing just the cusp of a movement where intelligent access programs will be put in place."[327]

He continued, suggesting other techniques are being used:

"*An example is on-board analysis of the truck speed, loading, the route that it has taken, all of this that will be available to the operator. At the moment we are expecting this to be a voluntary take-up and most of the large trucking operators are saying it would be to their own advantage. Once that is in place then there's a compliance, there's a record, almost like having a DVD of what has happened over the route to the extent that it can be extended to even have an on-board weighbridge so that you can measure the truck's loading. Quite often when trucks capsize it is not just about speed, it may be about loading. It might be about whether they are overloaded or whether they have exceeded the speed into an intersection.*"[328]

A number of Tasmanian heavy freight vehicle operators were invited to participate in the inquiry; however, responses were not received.

School Buses

The Committee's attention was drawn to safety issues involving children using buses to travel to and from school. However, other evidence suggested that children are at risk at times outside travelling to school. Mr Geoff Lewis (General Manager, Tasmanian Bus Association) outlined to the Committee the dangers facing children embarking and disembarking school buses:

"*One of our big concerns is the lack of respect that drivers give to school buses, or any bus, with flashing lights indicating. We have the view that it is not only schoolchildren getting on and off, it could be you or me getting off the bus, and that we need to advise the public that there are people in the vicinity of the area*."[329]

He added:

"*Unfortunately school bus travel is safe until you get off the bus. A total of 92 per cent of all incidents nationwide happen after a passenger gets off a bus; only 7 to 8 per cent of incidents happen on a bus*."[330]

Dr Peter Cairney, however, commented that the ARRB Group had conducted some research into child pedestrian safety and crashes in the vicinity of schools and found that "*there are as many crashes at other times as during school times*".[331]

Mr Lewis also commented on the issue of seatbelts on buses:

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[327] McIlfatrick *et al*, transcript of evidence, 26 March 2009, p. 53
[328] McIlfatrick *et al*, transcript of evidence, 26 March 2009, p. 53
[329] Lewis, transcript of evidence, 21 October 2008, p. 48
[330] Lewis, transcript of evidence, 21 October 2008, p. 55
[331] Cairney *et al*, transcript of discussion, 28 January 2009, p. 22

> "*Any bus under 27 seats should have seatbelts. For buses over 27 seats there are arguments for and against as to whether seatbelts should be there. If you do not have the right type of seats and you have what you call a Metro-style seat - a low seat with a bar across the top – there is evidence that no seatbelts create less damage than a lapbelt. There has to be a lapbelt and your head will hit the seat in front and you will cause more damage than you would by just going forward. One of the other problems is that if there is an accident and you have 40 kids hanging upside down in the air in seatbelts, how do you get them out?*"[332]

The Committee notes that in the United States and Canada, a school bus stop law requires motorists to stop when a school bus is loading or unloading passengers. Regulations also stipulate that buses carrying school children should have standard yellow livery and carry clear markings identifying them as school buses. School buses may also have stop signs attached to mechanical arms, which swing out to face motorists approaching from both directions.

The Committee invited Metro Tasmania to participate in the inquiry; however, Metro declined this invitation.

[332] Lewis, transcript of evidence, 21 October 2008, p. 57

Findings

The Committee found that –

36. Truck rollover crashes occur regularly on Tasmanian roads and have resulted in death and serious injury to drivers and other road users. Log trucks appear to be over-represented in rollover crashes.

37. Underrun protection fitted to heavy vehicles can reduce the severity of the injuries sustained during a crash by avoiding or reducing the other vehicle's contact with rigid structural parts of the heavy vehicle and the risk of being crushed.

38. A voluntary approach to underrun protection is contained in the 'Tasmanian Heavy Vehicle Safety Code'.

Recommendations

The Committee recommends that –

26. The ARRB Group be engaged to investigate all truck rollover crashes where the cause is not clearly established and the State Government take appropriate action to address issues arising from such assessments.

27. The State Government move towards requiring heavy vehicles to be fitted with underrun protection.

28. Heavy vehicle rigid licensing arrangements include instruction and advice relating to heavy vehicle safety and stability when a licence is issued and also when a licence is renewed.

10 Traffic Law Enforcement

Visible Presence of Police

The Committee observed in its *Interim Report* that "*a greater visible presence of police vehicles on Tasmanian roads would certainly act as a deterrent to motorists*" who exceed speed limits and breach the road rules. "*In turn, this could lead to a reduction in road crashes*," the report stated. The Committee agreed with witnesses who testified that for "*some time now the extent of the visible presence of police on Tasmanian roads has been inadequate*."[333]

Retired legal practitioner, Mr Roger Valentine, for example, submitted that regular and visible police presence on the roads would "*greatly improve behaviour of many drivers*".[334] Mr Valentine, former chairman of the Police Promotions Appeals Board, told the Committee he had been reliably informed that police patrols on the Midland Highway had been "*reduced dramatically*" due to a funding decrease.[335]

In his submission, former MP Mr Tony Benneworth stated that when travelling in Victoria and New South Wales, he had seen four to five police vehicles per day on the roads, which he described as being in "*stark contrast*" to his experience in Tasmania.[336]

Mr Randolph Wieranga (President, Police Association of Tasmania) affirmed that there "*is no greater deterrent than having a police car following you up the Midland Highway. You are not game to commit offences*."[337]

The Committee questioned Acting Commissioner of Police Darren Hine in relation to police numbers assigned to traffic enforcement. He said there are 86 officers dedicated to traffic, including 16 officers funded by the Road Safety Task Force.[338] "*Occasionally they do have to go and do other jobs, as we expect all our police officers to do,*" he said.[339] He pointed out that, in addition to this number, other police officers were used from time to time on traffic-related matters:

> "*Every police car is a traffic control car. There is no distinction between a traffic car and a normal police car that a general uniform officer would utilise. So every police officer is expected to and does intercept people for traffic offences.*"[340]

He told the Committee:

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[333] PP no. 56 of 2009, pp. 19-20
[334] Valentine, submission, p. 2
[335] Valentine, transcript of evidence, 24 March 2009, p. 27
[336] Benneworth, submission
[337] Wierenga, transcript of evidence, 7 May 2009, p. 8
[338] Hine *et al*, transcript of evidence, 6 May 2009, p. 7
[339] Hine *et al*, transcript of evidence, 6 May 2009, p. 7
[340] Hine *et al*, transcript of evidence, 6 May 2009, p. 8

> "*In relation to traffic law enforcement, research on both a national and international basis consistently recommends that the most significant deterrent effect is achieved as a result of an increased perception of the risk of apprehension. Perceived risk of apprehension can best be achieved by a combination of both overt and covert traffic law enforcement.*"[341]

The Committee endorses this viewpoint. Mr Hine added that the deployment and placement of officers is intelligence-focussed:

> "*If there is a major public event where there is a lot of traffic movement obviously that is when we will have more traffic personnel on to police that activity. If there is a major, planned statewide lock-down that is obviously where we would have a lot of the traffic personnel.*"[342]

The Committee asked the Acting Commissioner whether he thought more resourcing is required to enforce traffic laws and increase police presence. He said:

> "*I think it's one of those issues of how much is enough. At the moment we have X amount of resources that we actually put into traffic policing, and it's how you use those resources. We know there are traffic movements at three o'clock in the morning, but they are greatly reduced, so therefore your policing requirement is greatly reduced. We know during our Christmas and Easter periods that there are lot more people moving about. Therefore we have to be moving about as well.*"[343]

He later said:

> "*I do not think that the increased resources to traffic duty is the panacea. I think it is about how you use your resources at the time in relation to traffic policing. Just increasing the number of police officers that do traffic is not a panacea in relation to road safety.*"[344]

The Committee again reiterated questions relating to police resourcing. The Acting Commissioner did not concede that present resourcing for traffic policing is inadequate, stating:

> "*Every government service would love to have more resources; we know that. I am not going to deny that and I am not going to say I would not like a police officer on every corner of every street in a police car but we just know that is not a practical reality.*"[345]

As stated in the *Interim Report*, the Committee is of the view that increasing the number of police officers on traffic duty would have a positive impact on driver behaviour.

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[341] Hine *et al*, transcript of evidence, 6 May 2009, p. 1
[342] Hine *et al*, transcript of evidence, 6 May 2009, p. 7
[343] Hine *et al*, transcript of evidence, 6 May 2009, p. 12
[344] Hine *et al*, transcript of evidence, 6 May 2009, p. 21
[345] Hine *et al*, transcript of evidence, 6 May 2009, p. 35

Mr Jim Langford (MUARC) said that traffic volumes are generally lower during holiday periods and that the risk of crashes is probably less than for Friday and Saturday nights during non-holiday periods:

> "*You lose all your business travel during the holidays. Depending on where you are in Australia it is half the travel at any given time so in terms of absolute deaths and injuries the holiday periods are usually the safest of the lot. It is only when you start to consider it relative to the number of vehicles on the road that you suddenly see that individual risk per vehicle can quite often be higher, but again probably not as high as peak periods like Friday evenings and Saturday evenings.*"[346]

Mr Hine said that at times such as Easter and Christmas, more officers are on the roads and non-operational officers are sent on patrol.[347]

Appropriateness of Penalties

The Committee is pleased to note that it is observable that there has been a noticeable increase in the visible presence of police vehicles on the roads. Some witnesses argued that current penalties for traffic-related offences are too lenient as evidenced by the level of offending. Among options mooted were double demerit point periods and the suspension of licences rather than fines. However, Tasmania Police told the Committee that there is an advantage in retaining an element of discretion for relatively minor infringements. Nevertheless, witnesses appeared to concede that some drivers will continue to offend regardless of the penalty.

Mr Paul Ashley said penalties should be harsher:

> "*I think that maybe the penalties are not heavy enough to really deter people. If you put the penalty for drink-driving at, say, $10,000, people would say how ridiculous but maybe it is enough in somebody's brain to say, 'Well, I won't drink and drive'.*"[348]

Mr Paul Hogan (Chair, RSTF) said some people are lawless:

> "*If you consider that we have over 300,000 licensed drivers, or thereabouts or in excess of that, it is the minority that causes the grief typically and particularly… the recidivist bunch, but no amount of public education or legislation would change their attitude to the way they choose to behave on the roads. They probably have other issues that manifest themselves on our roads. They are lawless.*"[349]

He added:

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[346] Mitsopoulos-Rubens *et al*, transcript of discussion, 28 January 2009, p. 27
[347] Hine *et al*, transcript of evidence, 6 May 2009, pp. 9-10
[348] Ashley, transcript of evidence, 24 March 2009, p. 50
[349] Hogan and Sydes, transcript of evidence, 22 October 2008, p. 54

> "*The greatest deterrent is the fear of losing your freedom, which means loss of licence. That is the biggest single fear for most people – and probably embarrassment with your peers that you've lost your licence.*"[350]

For this reason, Mr Hogan said ensuring a "*more rapid rate of demerit point loss*" would have the desired effect on recidivist drivers rather than monetary penalties.[351]

The Committee asked Ms Lauren Scott whether licences would be valued more if the risk of losing it was greater. In response, she said:

> "*I definitely would because I do value my licence because I need it. It would be very hard without it. I know people who have lost their licence. One of them resorted to riding a bike to work every day. I remember how much he disliked that so he changed after the penalty was incurred.*"[352]

Mr Jeremy Rockliff MP (then Shadow Minister for Infrastructure) said positive behaviour should be rewarded:

> "*Rather than adopt a wholly punitive approach to road safety, we believe that the carrot-and-stick approach is the way to go, so you can also reward drivers for good behaviour as well as come down very heavily on those that do not abide by the laws.*"[353]

The Opposition's submission also suggested to the Committee that double-demerit point periods should be proclaimed at certain times.[354] Hon Bryan Green MP (then Chair, TRSC) said the Road Safety Council had sought advice on the subject of double demerit points. "*The advice that was received by the Council, particularly in talking to police throughout the process, was that it would not be effective*." Mr Green said.[355]

The Committee asked Mr Gary Liddle (CEO, VicRoads) whether Victoria has considered introducing a double demerit point policy. He remarked that it would lead to people being gaoled, as such a policy could lead to more people driving whilst suspended, the penalty for which includes imprisonment (in the case of repeat offenders, a one month period of mandatory imprisonment).[356]

Prof Max Cameron (MUARC) cautioned against raising penalties without raising the likelihood of detection, saying:

> "*As legislators, please resist the temptation to increase the penalties without raising the fear of detection. Whether it is real or perceived it doesn't matter, but raising the sanctions is not always the best way to go.*"[357]

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[350] Hogan and Sydes, transcript of evidence, 22 October 2008, p. 60
[351] Hogan and Sydes, transcript of evidence, 22 October 2008, p. 60
[352] Scott, transcript of evidence, 6 May 2009, p. 68
[353] Rockliff, transcript of evidence, 27 March 2009, p. 21
[354] State Opposition, submission, pp. 6-7
[355] Green and Nicholls, transcript of evidence, 17 June 2009, p. 2
[356] Information provided by VicRoads, 10 October 2009
[357] Mitsopoulos-Rubens *et al*, transcript of discussion, 28 January 2009, p. 10

The Committee, however, believes that a higher level of police visibility will provide a heightened risk of detection and will be more effective.

The Committee asked Mr Hine whether a tough, zero tolerance approach accompanied by mandatory penalties would be appropriate. He replied:

> "*I think we have a zero tolerance to drink-driving. We have a zero tolerance to disqualified driving and we have a zero tolerance for those matters that we do know cause fatal and serious accidents. In relation to some of the speeding offences we have a cautionary regime, and in some of the other offences we have too, where 43 per cent of those intercepted by a police officer for various offences get a caution and we think they are just as effective as giving someone a fine as well. We certainly have a zero tolerance on a number of aspects but also police officers need discretion as well. Sometimes an informal caution or a chat or whatever in relation to their driving behaviour will be just as effective, so I think the term 'zero tolerance' will not apply to everything that police do and I do not think it should apply to everything that police officers do because there is always that discretionary aspect.*"[358]

The Committee supports this approach. The tables below compare penalties for exceeding the speed limit and excessive blood alcohol among Australian States current during 2009.

Victoria[359]				
Exceed speed limit:	**<10km/h:**	$146	**25-30km/h:**	$310
	10-15km/h:	$234	**35-40km/h:**	$421
	15-25km/h:	$310	**40-45km/h:**	$421
			>45km/h:	$502
Exceed BAC:	**0.05-0.07:**	$350, 6 months disqualification or 10 points		
	0.07-0.15:	$350-$491 6 to 14 months disqualification		
	>0.15	Up to $2,290, 15 to 48 months disqualification. Such cases are heard by the magistrates court		

[358] Hine *et al*, transcript of evidence, 6 May 2009, pp. 16-17

[359] <http://www.vicroads.vic.gov.au/Home/RulesStandardsRegulations/AutomaticIndexationOfFeesAndPenalties.htm> at 1 July 2009, and <http://www.vicroads.vic.gov.au/Home/RulesStandardsRegulations/RoadRulesRegulations/DrinkDriving.htm>

New South Wales[360]				
Exceed speed limit:	**<10km/h:** **10-20km/h:** **20-30km/h:**	$84+1 point $197+3 points $338+4 points	**30-45km/h:** **>45km/h:**	$647+5 points $1,744+6 points
Exceed BAC:	**0.05-0.08:**	Maximum court-imposed $1,100 fine for first offence, $2,200 second offence, or disqualification		
	0.08-0.15:	Maximum court-imposed $2,200 fine, 9 months gaol and disqualification for first offence, second offence $3,300/12 months gaol/disqualification		
	>0.15:	Maximum court-imposed fine $3,300, 18 months gaol and disqualification for first offence, second offence $5,500/2 years gaol/disqualification		

Queensland[361]				
Exceed speed limit:	**<13km/h:** **13-20km/h:**	$133+1 point $200+3 points	**20-30km/h:** **30-40km/h:** **>40km/h:**	$333+4 points $466+6 points $933+8 points

Western Australia[362]				
Exceed speed limit:	**<9km/h:** **9-19km/h:**	$75 $150+2 points	**20-29km/h:** **30-40km/h:** **>40km/h:**	$250+3 points $350+5 points $1,000+7 points
Exceed BAC:	**0.05-0.06:** **0.06-0.07:** **0.07-0.08:** **0.08-0.09:** **0.09-0.1:** **0.1-0.11:**	$100 $100 $100 $400+3 months suspension $500+3 months $500+4 months	**0.11-0.12:** **0.12-0.13:** **0.13-0.14:** **0.14-0.15:** Exceed BAC penalties increase in steep increments for second and subsequent offences.	$600+4 months $600+5 months $700+5 months $700+6 months

South Australia[363]				
Exceed speed limit:	**<15km/h:** **15-30km/h:**	$190+1 point $302+ 3 points	**30-45km/h:** **>45km/h:**	$453+4 points $564+6 points
Exceed BAC	**0.05-0.08**: $438+4 points In cases involving higher BAC levels, the matter is heard by a court.			

[360] See <http://www.rta.nsw.gov.au/rulesregulations/penalties/speeding.html?rrlid=speedingpenalties> and <http://www.rta.nsw.gov.au/rulesregulations/penalties/serioustrafficoffences/alcoholanddrugs.html?rrlid=drugsandalcohol>

[361] See <http://www.transport.qld.gov.au/Home/General_information/Rules_and_regulations/-Fines_and_penalties/Demerit_points_scheme/>

[362] See <http://www.transport.wa.gov.au/mediaFiles/lic_drive_safe_book_09.pdf>

[363] See <http://www.dtei.sa.gov.au/roadsafety/Safer_behaviours/road_safety_offences>

Tasmania[364]				
Exceed speed limit:	**<10km/h:** **10-14km/h:** **15-22km/h:** **23-29km/h:**	$50+1 point $80+1 point $110+3 points $140+3 points	**30-37km/h:** **38-44km/h:** **>45km/h:**	$190+4 points $250+4 points $400+6 points
Exceed BAC:	**0.05-0.1** **0.1-0.15** **>0.15**	$240-$1,200, 3-12 months disqualification $480-$2,400, 6-18 months disqualification $600-$3,600, 12-36 months disqualification		

Acting Commissioner Hine said that notwithstanding a zero tolerance position regarding disqualified drivers:

> "*At the moment disqualified drivers are overrepresented in our serious and fatal accidents. Those who are disqualified know they are disqualified but they still choose to drive. No matter what we do, taking them off the road, they are still choosing to drive and ending up in the courts*."[365]

The Committee also discussed this issue with Sgt Michael Davis (Tasmania Police). "*In my 37 years we have never been able to stop anyone*," he told the Committee. He said some individuals "*cop it on the chin*" when they are disqualified, but there are habitual offenders who offend repeatedly, and even after having their vehicle seized, "*still go to their mate's place or go to the wreckers and buy a $500 car and get back on the road*."[366]

The Committee asked what process is followed when a disqualified driver is apprehended. He responded:

> "If they have a disqualification imposed by a court then we arrest them and they are charged. If they have prior convictions for driving while disqualified, we will make application for them to be remanded in custody, but that is entirely up to the court. If it is through a loss of demerit points, we deal with it by summons released at the time of dealing with them on the road. The power of arrest is only for a court-imposed disqualification."[367]

Sgt Davis affirmed: "*Penalties should be severe for disqualified drivers*."[368] The Committee agrees with this position.

Speed Detection

Three main problems or issues relating to speed enforcement were raised with the Committee. The first was that speed detection devices, although having a valid purpose, are unpopular with motorists because they are indiscriminate and unforgiving or are perceived to be used to raise revenue.

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[364] Road Safety (Alcohol and Drugs) Act 1970 (Tas.) s.17 and <http://www.transport.tas.gov.au/safety/traffic_infringement>

[365] Hine *et al*, transcript of evidence, 6 May 2009, p. 3

[366] Davis, transcript of evidence, 7 May 2009, p. 24

[367] Davis, transcript of evidence, 7 May 2009, p. 25

[368] Davis, transcript of evidence, 7 May 2009, p. 25

The Department of Treasury and Finance provided the Committee data showing the amount of revenue received through traffic offence fines. As seen below, the amounts are a tiny fraction of all Government revenue.

Traffic Offence Fines Revenue, Tasmania, 2000-2010[369] ($million)	
2000-01	6.6
2001-02	7.2
2002-03	6.9
2003-04	8.4
2004-05	8.0
2005-06	7.3
2006-07	8.5
2007-08	7.6
2008-09	7.5
2009-10	11.4

Tasmania Police provided the Committee with speeding offences data, which is shown below.

All Speeding Offences from Road Safety Cameras (SCINs) and On-the-Spot Policing (TINs), 2000-2010, Tasmania[370]			
	SCINs	TINs	Total
2000-01	50,260	20,535	70,795
2001-02	47,478	27,233	74,711
2002-03	54,881	29,345	84,226
2003-04	62,846	34,826	97,672
2004-05	56,352	35,173	91,525
2005-06	51,473	37,920	89,393
2006-07	61,337	44,819	106,156
2007-08	59,130	45,800	104,930
2008-09	59,953	44,801	104,754
2009-10	67,534	48,554	116,088

More males than females are being issued with speeding infringement notices and drivers in the age groups under-55 are being issued with approximately an equal proportion of infringement notices.

[369] Information provided by the Attorney-General and Minister for Justice, 9 September 2010. With the introduction of more advanced data management processes, the Committee was provided with a more detailed breakdown for the 2008-09 and 2009-10 financial years. This showed that infringements totalling a value of $12.9 million and $17.5 million had been imposed, respectively, although amounts received were less as some infringements had been withdrawn or remained unpaid.

[370] Information provided by Tasmania Police, 11 March 2009; information provided by Tasmania Police 7 September 2010

Speeding SCINs and TINs by Age Group and Gender 2009-10, Tasmania[371]				
Age Group	Female	Male	Unknown	Total
Unknown	67	205	28	300
<17	17	71	0	88
17-25	7,259	12,500	7	19,766
26-35	9,153	14,674	11	23,838
36-45	11,075	15,301	4	26,380
46-55	9,333	14,379	2	23,264
56-65	5,038	9,593	3	14,634
66-75	1,809	3,753	0	5,562
76-90	555	1,226	0	1,781
90+	9	16	0	25

Speeding SCINs and TINs by Margin Exceeding the Speed Limit 2008-09 and 2009-10, Tasmania[372]		
Margin Exceeding Speed Limit	SCINs	TINs
2008-09		
<10km/h	10	2,451
10-14 km/h	40,527	36,839
15-22 km/h	16,541	3,876
23-29 km/h	2,124	892
30-37 km/h	535	444
38-44 km/h	110	140
45+ km/h	106	159
2009-10		
<10km/h	26,318	5,943
10-14 km/h	29,812	35,354
15-22 km/h	9,532	5,351
23-29 km/h	1,359	1,173
30-37 km/h	377	464
38-44 km/h	86	160
45+ km/h	50	109

In 2009-10, there has been a noticeable increase in the number of infringements for exceeding the speed limit by less than 10km/h. Information Tasmania Police provided to the Committee explained:

> "*It is believed that the lowering of the road safety camera tolerance in October 2009 contributed to the increase in speeding offences in 2009/2010, especially in the <10km/h category (2,461 in 2008/2009 to 32,261 in 2009/2010)*."[373]

Further, this probably also accounts for much of the $4 million increase in revenue from traffic offence fines revenue in 2009-10.

[371] Information provided by Tasmania Police 7 September 2010
[372] Information provided by Tasmania Police 7 September 2010
[373] Information provided by Tasmania Police 7 September 2010

Mr Barry Oliver (Advanced Driving Techniques) said that while police deserve support, methods to detect speeding vehicles do not distinguish between law-breakers and those who may have technically breached the limit:

> "*The police deserve and have every right to expect the support of the community in what is a difficult and usually thankless task, but the situation is not helped by instances that occur from time to time. … It should be noted that speed-detection devices do not differentiate between the driver who quite innocently and without intent exceeds the nominated speed limit versus the driver who simply ignores the signs and most likely is a serial speeder.*"[374]

Mr Will Hagon (radio journalist) remarked that aircraft pilots would not be "*held to a 3 per cent error*" of speed, direction or height, whereas drivers of cars can be "*pinched*" for relatively small errors.[375] Mr Paul Hogan (Chair, RSTF) offered the opposite view, saying speed camera tolerances should be reduced:

> "*Most motorists in the State know in a 110 km/h zone they can travel at probably 118 km/h or maybe a bit better, without getting a ticket. … If we could reduce the tolerance by a couple of kilometres an hour and gradually sneak it down I am sure we could have a significant impact in the reduction of the road toll in the State.*"[376]

In a November 2009 report examining speed detection devices, the Auditor-General found that lowering speed camera tolerances would reduce speeding. The report observed:

> "*DIER routinely collects speeding data from a site near Copping, in southern Tasmania, using axle sensors embedded in the road. The data is not used for enforcement activity but is a useful source of information. The Copping data showed that for every speeder detected exceeding the tolerance there were another six exceeding the speed limit but within the tolerance being used at the time of the audit.*"[377]

Acting Commissioner Hine said that whilst Tasmania Police exercise zero tolerance, on other occasions police will give an informal caution, which he said could be "*just as effective*."[378]

A further issue relates to benchmarking. The Police Association of Tasmania alluded to the probability that to meet benchmarks or quotas, police are being drawn into placing speed cameras at locations where the volumes of speeding motorists are the highest, rather than on the basis of whether the location has a crash history. Mr Randolph Wierenga (PAT) observed:

> "*There is no difference between what kind of infringements they detect so long as they detect infringements. As one traffic policeman put it to me, 'If you have to go fishing, you may as well go where there's plenty of fish and get your fish early. It doesn't matter about the quality or the size of the fish'.*

[374] B. Oliver, transcript of evidence, 22 October 2008, p. 78
[375] Hagon, transcript of discussion, 2 February 2009, p. 6
[376] Hogan and Sydes, transcript of evidence, 22 October 2008, p. 56
[377] Auditor-General Special Report No. 85, 'Speed Detection Devices', November 2009, p. 18
[378] Hine *et al*, transcript of evidence, 6 May 2009, pp. 16-17

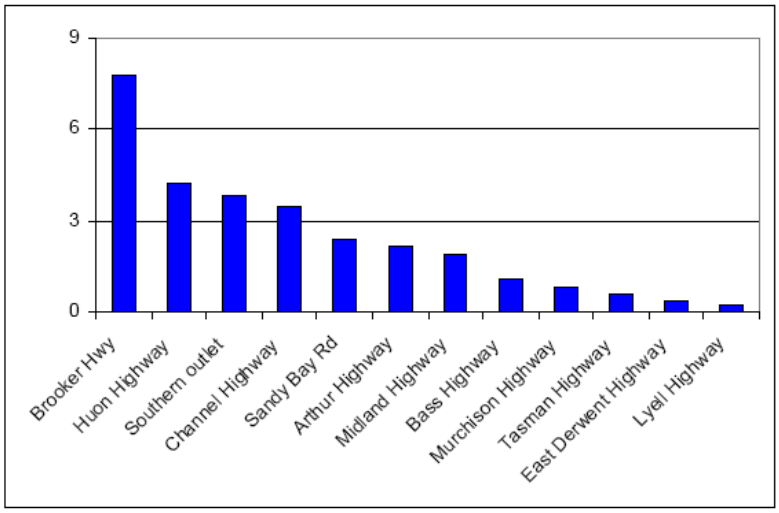
So that is basically what they do. They are not rewarded for going out and getting the offences that contribute to road crashes and fatalities because obviously some of those offences are much harder to detect. … They have to go where there is a large volume of offenders to reach their benchmarks."[379]

Mr Vince Taskunas (RACT) said his organisation supports the use of radar speed cameras "*provided they are utilised in speed deterrence programs operating in areas with known excessive speed-related crash rates.*"[380]

The Auditor-General's report mentioned above also considered whether the timing and placement of speed detection devices (SDD) "*represented an efficient use of resources*".[381] The report found:

- At certain highways and roads, there has been a ratio of over three speed detection devices deployed for every crash recorded and a ratio of eight to one for the Brooker Highway. At the other end of the scale, for some locations the ratio was less than one to one, which in the Auditor's view suggested "*an excessive focus on some locations*".[382]

SDD Deployments per Crash[383]

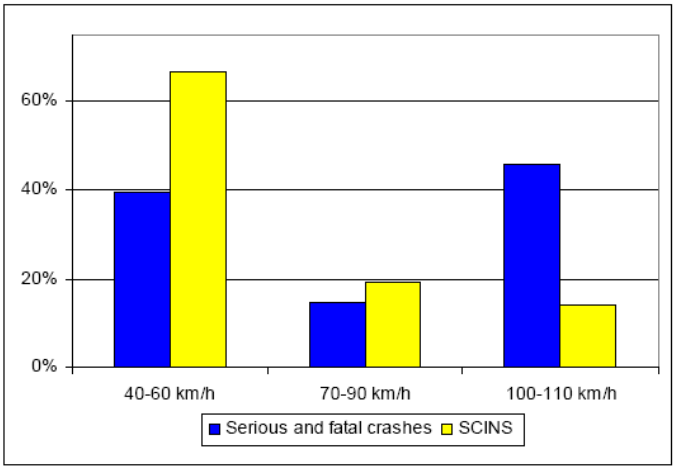


Source: Auditor General's Special Report No. 85

- Whereas over 40% of serious injury and fatal crashes occur in zones limited between 100km/h and 110km/h, these zones account for less than 20% of infringement notices issued. By comparison, 40km/h to 60km/h zones accounted for over 60% of infringement notices and 40% of serious casualty crashes, which the Auditor described as "*disproportionate*".[384]

[379] Wierenga, transcript of evidence, 7 May 2009, p. 1
[380] Taskunas and Bridges, transcript of evidence, 14 October 2008, p. 56
[381] Auditor-General Special Report No. 85, 'Speed Detection Devices', November 2009, p. 20
[382] Auditor-General Special Report No. 85, 'Speed Detection Devices', November 2009, p. 21
[383] Auditor-General Special Report No. 85, 'Speed Detection Devices', November 2009, p. 21. The data shown relates to deployments between July 2008 and December 2008
[384] Auditor-General Special Report No. 85, 'Speed Detection Devices', November 2009, p. 23

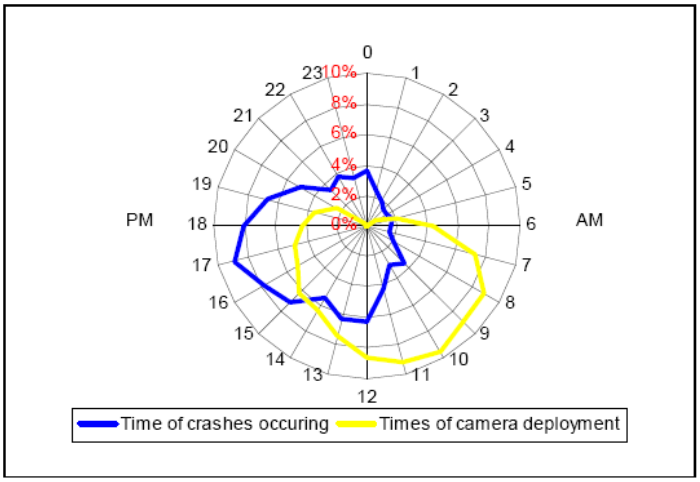
Percentage Comparison Between Serious Casualty Crashes to SCINs, 2003 to 2008[385]



Source: Auditor General's Special Report No. 85

- The report also found that although "*the majority of fatal and serious crashes happened in the afternoon… most speed camera deployments occurred in the morning*." Factors such as 24-hour coverage and school zones were noted. "*Nonetheless*," the report stated, "*we believe the disparity between the timing of crashes and SDD deployment was excessive.*"[386]

Crash Time and Speed Camera Deployment Comparison[387]



Source: Auditor General's Special Report No. 85

The third aspect of speed enforcement was the greater use of new technology that does not involve police being at the scene of an offence in person. In particular, Prof Max Cameron (MUARC) said that automatic surveillance devices have attractiveness to police because "*police forces typically do not have enough*

[385] Auditor-General Special Report No. 85, 'Speed Detection Devices', November 2009, p. 23
[386] Auditor-General Special Report No. 85, 'Speed Detection Devices', November 2009, p. 24
[387] Auditor-General Special Report No. 85, 'Speed Detection Devices', November 2009, p. 24

resources to be everywhere all the time".[388] He also said that covert, random space and time techniques achieve a long-term effect on the general driving population, whereas overt targeted techniques achieve a localised effect.[389] He also commented:

> "*The grim reality is that if you want to cover a broad part of the road system much more cost effectively, then camera surveillance comes into its own. All the economics show that quite clearly, and used in the right way they can have very powerful effects on speed everywhere most of the time.*"[390]

Victorian authorities have installed a point-to-point speed measurement system on the Hume Freeway. This system involves an unmanned device reading the speed (and number plates) of passing vehicles at point 'a' and a second device taking a measurement at point 'b' further along a road. If the average speed of a vehicle over that distance has exceeded the limit, an offence against the driver can be sustained – provided the devices have been maintained technically to the highest accuracy.[391] The Committee notes that the State 2010-11 Budget Papers includes funding for the "*implementation and administration of point-to-point speed enforcement*"[392] as well as funding for Automatic Number Plate Recognition (ANPR) cameras.[393]

Detecting Drink-Drivers

Literature and research has confirmed the effectiveness of breath-testing operations and adequate BAC limits as a means to improve road safety.[394] Tasmania Police provided the following information in relation to alcohol and drug charges.

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[388] Mitsopoulos-Rubens *et al*, transcript of discussion, 28 January 2009, p. 3
[389] Mitsopoulos-Rubens *et al*, transcript of discussion, 28 January 2009, p. 4
[390] Mitsopoulos-Rubens *et al*, transcript of discussion, 28 January 2009, p. 9
[391] Victorian Department of Justice, 'Point to Point Cameras', at <http://www.justice.vic.gov.au/wps/wcm/connect/ccc/CCC/Home/Cameras/Camera+Information/Point-to-Point/> [accessed June 2010]
[392] Tasmanian Budget 2010-11, Budget Paper No. 2, vol. 1, p. 6.4
[393] Tasmanian Budget 2010-11, Budget Paper No. 2, vol. 2, p. 9.3
[394] Henstridge, J, *et al*, *The Long-Term Effects of Random Breath Testing in Four Australian States: A Time Series Analysis* (Federal Office of Road Safety, Canberra, 1997) report CR 162; Fell, James C, and Voas, Robert B, 'The Effectiveness of Reducing Illegal Blood Alcohol Concentration (BAC) Limits For Driving: Evidence for Lowering the Limit to .05 BAC', *Journal of Safety Research*, no. 37, 2006, pp. 233-243

Drink Driving Charges, Drug Driving Charges and Combined Alcohol and Drug Charges, 2000-2008, Tasmania[395]			
	Alcohol Charges	Drug Charges	Combined Charges
2000-01	3,797	26	0
2001-02	4,692	14	1
2002-03	4,770	17	0
2003-04	4,750	26	2
2004-05	4,699	26	2
2005-06	4,909	50	2
2006-07	5,347	154	1
2007-08	5,664	253	3
2008-09	5,512	273	8
2009-10	5,644	313	6

The Committee found, however, that rates of detection varied depending on the method employed to detect offenders. As such, in its *Interim Report* the Committee concluded:

> "*The detection of drink-driving offenders requires a more specifically targeted approach by police, rather than the current emphasis on high volume random testing.*"[396]

Methods of detecting drink-drivers fall into three main categories:

(a) Placing high visibility breath testing (RBT) sites at random locations and at random times of day, conducting high volumes of tests with the aim of having a long-term deterrent effect across all motorists (general deterrence);

(b) Intelligence-based operations targeting locations such as public events or drinking establishments at times when, in all probability, some motorists are expected to attempt to drive following the consumption of alcohol; or

(c) Officers on patrol intercepting individual vehicles using their experience to know where and when drink-drivers will be on the road.[397]

The Police Association of Tasmania cited figures contained in the Tasmania Police Corporate Performance Report 2007-08. This report shows that 213,000 drivers were tested and 679 drink-driving offences were detected through random breath tests (method 'a' above) whereas 466,000 drivers (methods 'b' or 'c') were tested and 4,186 drink-driving offences were detected.[398] Thus, in other words, RBTs detected one drink-driving offence per 313 tests whereas targeted operations and vehicle-to-vehicle intercepts detected one drink-driving offence

[395] Information provided by Tasmania Police, 11 March 2009; Information provided by Tasmania Police 7 September 2010. Offenders who committed more than one offence arising from a single detection have been counted as separate offences.

[396] PP No. 56 (2009), p. 17

[397] Healy *et al*, transcript of discussion, 27 January 2009, p. 9; Wierenga, transcript of evidence, 7 May 2009, p. 3

[398] Wierenga, transcript of evidence, 7 May 2009, p. 3; information provided by Police Association of Tasmania (21 October 2009)

per 111 tests. Mr Randolph Weirenga (President, Police Association of Tasmania) said:

> "*The old police officer on patrol, knowing where drink drivers are and what time they are around is a far better method of catching drink drivers*."[399]

Further, figures show that whilst the number of breath tests conducted in Tasmania has increased, the percentage of offenders subsequently charged has reduced. However, the opposite trend has been apparent in 2009-10.

Drink Driving Random Breath Tests (RBTs) in Tasmania[400]			
	RBTs – Number Conducted	Numbers Exceeding Prescribed Limit	RBTs – Per Cent Charged
2003-04	438,326	3,943	0.90
2004-05	478,672	4,046	0.85
2005-06	608,471	4,132	0.68
2006-07	702,362	4,426	0.63
2007-08	679,632	4,865	0.72
2008-09	678,140	4,563	0.67
2009-10	613,945	5,120	0.83

One explanation for this trend, the Committee was informed, is that whilst the enforcement of drink-driving laws has ensured most drivers do not drive above the legal limit, at the same time a remaining cohort of offenders repeatedly persist with their actions. This group, the Committee was told, has become a problem that existing mechanisms of law enforcement do not have the capacity to solve.[401] Victorian authorities informed the Committee that whilst they are able to breath test three million drivers, by comparison funding exists for only 20,000 drug tests per year. Further, Victorian authorities said that drivers in rural areas "*know they are not going to be tested*" as most testing occurs in the cities.[402]

[399] Wierenga, transcript of evidence, 7 May 2009, p. 3.
[400] Department of Police and Emergency Management, 'Annual Report 2007-08', October 2008, p. 39
[401] Mitsopoulos-Rubens *et al*, transcript of discussion, 28 January 2009, p. 38
[402] Healy *et al*, transcript of discussion, 27 January 2009, p. 24

Findings

The Committee found that –

39. Licence disqualification is a more effective deterrent than monetary penalty options.

40. The visible presence of police vehicles on roads acts as an integral and effective deterrent to road users committing offences and engaging in unsafe risk-taking.

41. A disturbing number of disqualified drivers persist in driving on public roads.

42. Penalties imposed on disqualified drivers are often an inadequate deterrent.

43. Generally, penalties for traffic offences in Tasmania are lower than for equivalent offences in other Australian jurisdictions.

Recommendations

The Committee recommends that –

29. The substance of the recommendations in the Auditor-General's Special Report no. 85 on speed detection devices be implemented.

30. Penalties imposed for driving whilst disqualified should be such as to provide a greater deterrent and reflect the seriousness of the offence.

31. There be an ongoing commitment to provide additional resources to Tasmania Police to ensure there is an even greater increase in the visible presence of police on Tasmanian roads.

11 Vehicle Safety

New vehicles released onto the Australian market are required to comply with Australian Design Rules (ADRs) pursuant to the *Motor Vehicle Standards Act 1989* (Cth), which are supplemented by State and Territory laws. As such, vehicle standards are largely in the regulatory domain of the Commonwealth[403] though implementation is the responsibility of State and Territory authorities. The RACT pointed out in its submission that the safety standards of Australian vehicles "*is a function of where they come from*", with Japanese and South Korean imports less likely to be fitted with Electronic Stability Control (ESC), for example. [404]

Mr Doug Ling (Driver Safety Services) said vehicle safety improvements could be credited with improving road safety:

> "*The severity of crashes has reduced over the last 15 to 20 years and governments take credit for that generally in the public education programs and enforcement programs, but our position is that the main reason that there's been a decrease in severity of crashes is due to the improvement in occupant protection in vehicles, which has been quite dramatic in the last 15 years.*"[405]

Mr David Healy (Road Safety Manager, Victorian Transport Accident Commision) said the road toll would "*drop by one third*" if everybody drove the safest vehicles available. [406]

This is correct in theory: occupant injury risk is lower in new vehicles relative to older vehicles. This risk is measured in terms of a 'crashworthiness' index, which is a combined measure of the risk of serious injury for drivers involved in crashes where a vehicle is towed away. Ratings are derived from actual crash data (police reports) covering a range of vehicle makes, models and crash locations. The index also takes into account how often occupants of specific vehicle makes and models have been injured (or uninjured) after a tow-away crash. Compiled results are circulated publicly as the 'Used Car Safety Ratings'. A similar concept is the New Car Assessment Program (ANCAP), although when ascertaining vehicle safety standards ANCAP bases its findings on crash tests under laboratory conditions rather than examining actual crashes.[407]

In 2008, Tasmania had the oldest vehicle fleet in Australia at an average age of 11.9 years, down from 12.4 years in 2003, with 30.8% of its fleet manufactured prior to 1993.[408]

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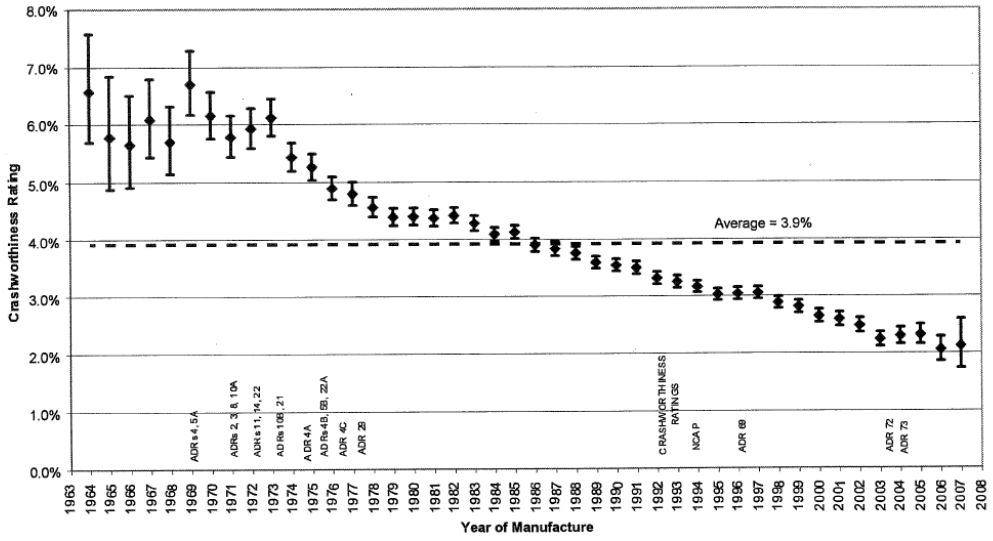
[403] Small *et al*, transcript of discussion, 30 January 2009, p. 11
[404] RACT, submission, p. 7
[405] Ling and Jerrim, transcript of evidence, 14 October 2008, p. 87
[406] Healy *et al*, transcript of discussion, 27 January 2009, p. 41
[407] Newstead, Stuart *et al*, 'Vehicle Safety Ratings Estimated from Police Reported Crash Data: 2009 Update', MUARC report 287, p. 2
[408] ABS, 'Motor Vehicle Census', 9309.0, March 2008, p. 6 and p. 11. The Northern Territory has the youngest vehicle fleet at an average age of 8.9 years, with 17.3% of its vehicles manufactured prior to 1993.

Whereas the crashworthiness of a vehicle built in 1993 is above 3%, a vehicle built in 2007 is near to 2% (a lower percentage representing an improvement). Thus, as Mr Healy hypothesised, a one-third reduction in road trauma is probable if all vehicles were no more than one or two years old. This is a generalisation, however, as the detail of MUARC's analysis showed crashworthiness varied depending on the exact make and model of vehicle.

Crashworthiness by Year[409]

Figure 34: *Crashworthiness by year of manufacture (with 95% confidence limits)*



Newstead, Stuart *et al*, 'Vehicle Safety Ratings Estimated from Police Reported Crash Data: 2009 Update', p. 69

Notwithstanding the primacy of national standards in the realm of vehicle safety, Victoria has effected a requirement for new vehicles introduced into the Victorian market to be equipped with ESC from 2011 and head protection technology from 2012.[410]

In 2008 the Victorian Parliament Road Safety Committee investigated vehicle safety, observing in its report:

> "*Of the leading edge technologies identified by the Committee two stand out as the number one priority. These are Pre-emptive Brake Assist for cars and heavy vehicles and Anti-Lock Brake Systems for motorcycles. The Committee recommends that these two technologies be mandated through the same process employed by the Victorian Government to mandate Electronic Stability Control and curtain airbags to ensure fitment to all vehicles.*"[411]

[409] Newstead, Stuart *et al*, 'Vehicle Safety Ratings Estimated from Police Reported Crash Data: 2009 Update', MUARC report 287

[410] Healy *et al*, transcript of discussion, 27 January 2009, p. 41

[411] Parliament of Victoria Road Safety Committee, *Inquiry into Vehicle Safety* (Parliament of Victoria, East Melbourne, 2008), p. xii (document VIC.d34)

The RACT's submission called for government fleet vehicles to have high safety standards as these vehicles would flow into the private market:

> "*The RACT strongly lobbied the Tasmanian Government over a number of years to buy higher ANCAP-rated vehicles for its government fleet; in particular, the RACT argued that all Tasmanian Government cars should have ESC and head-protection airbags. The philosophy behind this was the trickle-down effect of safer cars from the resale of government vehicles into the private fleet in Tasmania, thus making the light vehicle fleet in our State much safer.*"[412]

Dr David Logan (Senior Research Fellow, Vehicle Safety, Test Evaluation and Crash Research, MUARC) held a similar view:

> "*One of the possibilities for accelerating the rate of improving vehicle safety through the take-up of modern safety features is to try to encourage corporate and government fleets to take up the best possible safety features they can, because they tend to be the group who can most afford it and you are trying to avoid penalising the disadvantaged, so to speak, but their vehicles tend to have fairly quick turnover time so they soon become a semi-new vehicle for someone in the private fleet.*"[413]

Unroadworthy Vehicles

The RACT informed the Committee that, in the experience of that organisation, there are many vehicles on Tasmanian roads in a defective condition, particularly relating to tyre inflation. The RACT submitted that vehicle defects are "*a persistent minority factor*" appearing in the data relating to crash causes in Tasmania.[414] Mr Barry Oliver (Advanced Driving Techniques) stated:

> "*Unfortunately when determining the cause of a crash the answer will usually be inappropriate speed for the conditions when in fact the poor tyre condition was probably a major contributing factor.*"[415]

Mr Vince Taskunas (General Manager, Public Policy and Communications, RACT) said that as a result of the RACT periodically offering free safety checks to motorists, these inspections had "*picked up a startling number of defects*". [416] Mr Alex Jerrim (Driver Safety Services) said:

> "*The only thing of any significance in terms of vehicle defect is tyre failure, and where tyre failure is concerned that is mostly due to lack of maintenance on the driver's part and usually low tyre pressure.*" [417]

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[412] RACT, submission, p. 8; see also Taskunas and Bridges, transcript of evidence, p. 59
[413] Mitsopoulos-Rubens *et al*, transcript of discussion, 28 January 2009, p. 17
[414] RACT, submission, p. 12
[415] B. Oliver, transcript of evidence, 22 October 2008, p. 77
[416] Taskunas and Bridges, transcript of evidence, pp. 60-61
[417] Ling and Jerrim, transcript of evidence, 14 October 2008, p. 100

Tasmanian crash factor data in this area, however, is not specific beyond the general descriptor "*vehicle defect*"; consequently the extent to which tyre-related defects have been at play is, from a statistical perspective, uncertain.

In 2001 the Victorian Parliament Road Safety Committee investigated, amongst other matters relating to vehicle roadworthiness, "*the extent to which vehicle roadworthiness is involved as a primary or contributing factor in crash causation.*"[418] An analysis of 4,511 crashes in Victoria from 1994 to 1999 provided to that Committee found that 3.55% of vehicles involved in crashes were noted as having a defect and, within this percentage, a vehicle defect was positively linked to causing a crash in 0.79% of cases. Counting other cases where a defect was "*possibly*" the cause, the proportion was 2.26%.[419]

The Committee was also told that drivers tend to accommodate vehicle faults into their driving technique. Mr Alex Jerrim (Driver Safety Services) said:

> "*In general, people will adapt their behaviour according to the vehicle they are driving; if you put someone in a more dangerous vehicle they will drive more cautiously. That is a very broad statement but that is the general principle.*"[420]

The RACT suggested to the Committee that an inspection system should be established to identify defective vehicles using our roads. Mr Vince Taskunas said:

> "*We have formed a view using some of that evidence about defects and safety defects in vehicles and used some of that evidence to support our position that we believe that there should, potentially, be a system of inspections to try to net out some of the safety defects that we are seeing in the fleet, using a number of different sources such as the information from the crash factors and fatalities and our own inspections every year, our winter safety checks that we provide free and also police numbers about discontinuance or defect notices.*"[421]

In its submission, the RACT proposed introducing "*a system of safety certificates*" based on current practices in Queensland, whereby cars over five years old would need a certificate of roadworthiness before being offered for sale. Such certificates would be is issued only if the vehicle is able to pass an inspection and assessment process.[422] However, the RACT indicated that it "*is not proposing mandatory annual inspections.*" [423] The report of the Victorian Parliamentary Road Safety Committee's inquiry into vehicle roadworthiness contained the following passage:

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[418] Victorian Parliamentary Road Safety Committee, *Inquiry into Victoria's Vehicle Roadworthiness System* (Parliament of Victoria, East Melbourne, 2001), p. xii

[419] Victorian Parliamentary Road Safety Committee, *Inquiry into Victoria's Vehicle Roadworthiness System* (Parliament of Victoria, East Melbourne, 2001), p. 5

[420] Ling and Jerrim, transcript of evidence, 14 October 2008, p. 100

[421] Taskunas and Bridges, transcript of evidence, p. 58

[422] RACT, submission, pp. 12-13; see also <http://www.transport.qld.gov.au/Home/Registration/Motor_vehicles/Buying_or_selling_a_used_vehicle/Safety_certificates/>

[423] RACT, submission, p. 13

"*The Committee investigated Australian jurisdictions and New Zealand which have compulsory vehicle inspections and could find no compelling evidence based on crash statistics to support their introduction into Victoria.*"[424]

Another witness proposed introducing a bounty as a means of removing unroadworthy cars from the roads. In his submission, Mr Steve Richardson suggested giving a $2,000 bounty "*on surrender of compliance plates and registration plates of Tasmanian-registered vehicles with compliance plates more than ten years old.*" [425] Mr Richardson said:

"*I suppose this submission would not be popular in my industry, but seeing the cars that are on the road, seeing cars that are practically commercially worthless that are still registered on our roads, driven primarily by people who are… in lower socioeconomic areas and unfortunately more exposed to the dangers of older vehicles, the concept of the bounty really is to give people that are driving around in old and unroadworthy cars an incentive to take the money, to surrender the car and get it off the road, recycle it, do whatever happens to it to get it off the road, but to give them a quantity of money beyond what their car is most probably worth to find something better.*" [426]

Mr Richardson also commented:

"*As to how you actually then get them into a newer vehicle, how that is managed, I do not have the answer.*"[427]

[424] Victorian Parliamentary Road Safety Committee, *Inquiry into Victoria's Vehicle Roadworthiness System* (Parliament of Victoria, East Melbourne, 2001), p. ii
[425] Richardson, submission, p. 1
[426] Richardson, transcript of evidence, 15 October 2008, pp. 23-24
[427] Richardson, transcript of evidence, 15 October 2008, p. 24

Findings

The Committee found that –

44. Tyre defects and incorrect tyre pressures are real though less frequently cited factors contributing to road crashes.

45. Vehicle defects are a contributing factor to road crashes, though also less frequently cited.

46. Tasmania has the oldest vehicle fleet in Australia.

47. Newer vehicles with higher ANCAP ratings are an important factor in road safety.

Recommendations

The Committee recommends that –

32. The State Government develop policies designed to reduce the average age of the vehicle fleet on Tasmanian roads to ensure a greater proportion of vehicles have modern safety features.

33. All vehicles be required to undergo a roadworthiness inspection at 10 years from the date of production, again at 15 years, and annually thereafter.

34. There be a public education and awareness campaign focussing upon tyre defects and tyre pressures.

12 Mandatory Use of Headlights

Currently in Tasmania, under the *Traffic (Road Rules) Regulations 1999*, headlights must be "*operating effectively*" and be "*clearly visible*" at night, during hazardous weather conditions, or during the day in fog. However, in the latter situation, "*a driver may drive without the headlights… operating if the vehicle is fitted with front fog lights and those lights are operating effectively and are clearly visible.*"[428] In evidence, some witnesses called for the use of headlights at all times (daytime running lights – DRLs) to be made a mandatory practice.

Mr Bob Holderness-Roddam, for example, stated:

> "*Headlights improve vehicle visibility for other road users, including cyclists and pedestrians, when turned on during daytime. All vehicles should have their headlights wired into the electrical systems so that they are on whenever the engine is running.*"[429]

Mr Paul Ashley said use of headlights prevents vehicles from blending into surroundings:

> "*If it's drizzly rain or if it's actually raining – or really at any time but certainly at that time – a lot of cars and even trucks blend in with the surroundings and you can't see them; it's as simple as that. But if they've got their headlights on you can see them.*"[430]

Mr Alwyn Johnson, based on situations he has experienced in heavy fog, told the Committee that use of park lights only in foggy conditions does not make vehicles sufficiently visible. He said that on a road such as the West Tamar Highway, driving in fog "*is like Russian roulette*".[431] He recommended that the use of headlights at all times should be addressed through legislation.[432]

Literature and research on the subject confirms that a crash reduction could be expected if use of DRLs were mandated.[433] However, whilst studies have consistently found a reduction would occur, depending on the methodology employed, results have varied widely.[434] As summarised by one literature review:

> "*DRL should affect only multiple-party daytime crashes. Because DRL is a daytime conspicuity aid, nighttime crashes cannot be affected. Because the effect of DRL is to alert other road users to the presence of the vehicle, single vehicle crashes cannot be affected… Multiple-party daytime crashes have therefore been the focus of most research into DRL.*

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[428] *Traffic (Road Rules) Regulations 1999* (SR 1999 No. 131) (Tas) rule 215
[429] Holderness-Roddam, submission, p. 6
[430] Ashley, transcript of evidence, 24 March 2009, p. 41
[431] Johnson, transcript of evidence, 7 May 2009, pp. 30-31
[432] Ashley, transcript of evidence, 24 March 2009, p. 44
[433] Cairney, Peter, and Styles, Tanya, *Review of the Literature on Daytime Running Lights (DRL)* (ATSB/ARRB Group, Canberra, 2003), CR 218, p. 57
[434] Cairney, Peter, and Styles, Tanya, *Review of the Literature on Daytime Running Lights (DRL)* (ATSB/ARRB Group, Canberra, 2003), CR 218, p. 61

Studies of the effects of DRL have been of two types, fleet studies and traffic system studies. …

True fleet studies have some methodological problems, in that they may have been introduced as part of a package of measures following an adverse crash history, so the effects of DRL may be confounded with other measures and be subject to regression to the mean effects. Other possible problems are assignment of best (or worst) drivers to the treated vehicles, thus biasing the results. Finally, there is the possibility that drivers are aware they are part of a trial, and so drive more carefully as a result.

System wide studies require care in their design to avoid methodological problems. … The main issue here relates to the use of the odds ratio as a means of analysis. Many studies rely on comparing the odds of a multiple-party crash during daytime (i.e. multiple-party daytime crashes/single party daytime crashes) to the odds of a multiple-party nighttime crash (i.e. multiple-party night time crashes/single-party nighttime crashes). The resultant statistic is known as the odds ratio, and although convenient in many ways it is sensitive to changes in the level of nighttime crashes for reasons which have nothing to do with DRL… The interpretation of the odds ratio is problematic unless all crashes other than multiple-party daytime crashes have remained close to the pre-DRL values. Many studies are difficult to interpret because they report only the odds ratios, and not the crash numbers on which they are based."[435]

If use of DRLs were mandated, secondary issues of cost, road user acceptance and transition arrangements would have to be addressed.[436]

In any event, Europe has moved to mandate use of DRLs. In September 2008, the European Commission (the Executive arm of the European Union) directed EU member states to require new vehicles to have dedicated daytime running lights installed by 2011 (or 2012 for some categories of vehicles).[437]

[435] Cairney, Peter, and Styles, Tanya, *Review of the Literature on Daytime Running Lights (DRL)* (ATSB/ARRB Group, Canberra, 2003), CR 218, p. 19

[436] Cairney, Peter, and Styles, Tanya, *Review of the Literature on Daytime Running Lights (DRL)* (ATSB/ARRB Group, Canberra, 2003), CR 218, pp. 57-59

[437] *Official Journal of the European Union* L 257, 25 September 2008, Commission Directive 2008/89/EC, pp. 14-15

Findings

The Committee found that –

48. The use of headlights in foggy or other hazardous weather conditions and in fair weather improves the visibility of the vehicle to other road users.

Recommendations

The Committee recommends that –

35. The use of headlights in foggy and other hazardous weather conditions be enforced in accordance with the terms of the *Road Rules* and that this be promoted through a public education program.

36. The use of headlights during the daytime in fair weather be encouraged but remain voluntary.

13 Roads

Road Design and Maintenance Standards

The Committee has been provided with technical reports relating to the condition of corridor highways in Tasmania forming part of the AusLink (national highway) network. An Australian Road Research Board (ARRB) Group road survey vehicle collects relevant information and summary reports relating to these highways are prepared for the Australian Government as part of an agreement with the State for determining maintenance funding. Maintenance performance is measured against two benchmarks: the riding quality indicator (RQI) and the preventative maintenance indicator (PMI). Each is rated from good to very poor (on separate scales of measurement) calculated using data collected from the survey vehicle.[438] Further detail is contained in appendix 1 of the *Interim Report*.

Information provided by DIER to the Committee shows that at September 2009:

- 162.92km of the Midland Highway, or 86.2% of its length, was rated as having a "*good*" RQI.
- 123.13km of the Midland Highway, or 65.25% of its length, was rated as having a "*good*" PMI.
- 187.74km of the Bass Highway (from Launceston to Burnie only), or 79.3% of its length, was rated as having a "*good*" RQI.
- 204.03km of the Bass Highway (from Launceston to Burnie only), or 86.2% of its length, was rated as having a "*good*" PMI.[439]

The Committee, however, is of the view that regular travellers on these roads would doubt that these findings accurately or meaningfully represent the current actual surface condition.

In addition to the above assessments, the Australian Road Assessment Program (AusRAP) rates arterial highways around Australia for standards of safety and design.[440] According to its website:

> "*AusRAP… produces maps showing the risk of road crashes that cause deaths and life-threatening injuries and rates roads for safety. It highlights improvements that could be made to roads to reduce the likelihood of crashes – and to make those that do happen survivable.*"[441]

[438] Information provided by DIER (22 October 2009)
[439] Information provided by DIER (22 October 2009)
[440] RACT, submission, p. 10; Taskunas and Bridges, transcript of evidence, p. 61
[441] 'About Us' <http://www.ausrap.org/ausrap/aboutus.htm> [accessed September 2010]

AusRAP rates roads against, firstly, their crash history and traffic flows; and secondly standards of design. In terms of design standards, AusRAP has rated AusLink highways within Tasmania.

The East Tamar Highway, Midland Highway, and the Bass Highway between Launceston and Devonport received three star ratings (out of five). The Brooker Highway and most of the Bass Highway between Burnie and Devonport received four star ratings.[442] An assessment of other State highways in Tasmania is not available.

The RACT's submission called on the State Government to "*embrace the AusRAP program*" (Australian Road Assessment Program) and extend it to main State highways.[443]

Further, according to AusRAP's website, it has not been able to produce a risk map for Tasmania based on crash history and traffic flow as the "*Tasmanian road authority did not supply the necessary traffic and crash data*". Such maps are, however, available for all other States and Territories.[444] It is surprising to the Committee that this has not been supplied.

Engineers Australia has produced a report assessing the strategic adequacy of Tasmania's infrastructure. The report observed:

> "…*Local roads are generally poor and failures are common due to the employment of reactive maintenance practices. State roads have maintained their standard, with the additional expenditure on these roads resulting in some of the backlog of work being addressed. National roads have deteriorated due to increasing freight usage and road pavements exceeding their design life, while the significant investment in national roads has principally been catch-up expenditure*."[445]

According to Mr Blair Turner (Senior Research Scientist, ARRB Group), 'black spots' – or locations of road renowned for being crash sites – as they are referred to, are diminishing in number. He said:

> "*What we are seeing now throughout Australia and overseas is that the black spots are starting to decline; the hard ones remain but the easy ones have been treated. That is even the case in countries like Sweden and the Netherlands, where they are in a situation now where they have very few black spots remaining. It is particularly true on rural road networks and in areas of smaller population – lower traffic volumes – so I guess Tasmania would be a good example where perhaps there are fewer black spots remaining now. We are not saying there are no black spots, we are just saying that there are other measures needed to actually address risk on the roads.*" [446]

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[442] <http://www.ausrap.org/ausrap/starratings.htm> [accessed September 2010]
[443] RACT, submission, p. 10
[444] <http://www.ausrap.org/ausrap/riskmaps.htm> [accessed September 2010]
[445] Engineers Australia, 'Infrastructure Report Card 2010: Tasmania', May 2010, p. 24
[446] Cairney *et al*, transcript of discussion, 28 January 2009, p. 10

He added that future crash locations could be predicted through road network audits and survey vehicles that can collect data and "*estimate the level of risk along an entire route*" of a road.[447]

Dr Soames Job, commenting on this evidence, said he thought it to be "*excessive technology looking for a use rather than a legitimate assessment of the safety of a road.*"[448] In his view,

> "*We do not need a technological guess as to where they [crashes] will happen in the future. Most of us are in the ugly position that we already have enough crashes happening to know what we should be doing. We do not need technology to tell us where crashes will happen. If they are not already happening there you are not going to get good value spending money there. If they are not already happening there the chances are they won't in the future. You have lots of other locations where they are happening. Treat those locations.*"[449]

Mr Vince Taskunas said safety dividends can "*come from simple, cost-effective road engineering solutions*" such as "*sealing shoulders or covering up roadside trees and separating two-plus-one highways with a barrier*".[450] He added that there would be a number of anecdotal examples in Tasmania where wire rope barriers have prevented head-on and side-on crashes from occurring.[451]

Midland Highway

The subject of the Midland Highway was covered in some depth in the Committee's *Interim Report*. The *Interim Report* found that the surface condition of this highway had, by the latter half of 2009, deteriorated to an unsafe level and recommended a review of speed limits on all, or some sections of, national highways in Tasmania.

The Committee remains conscious of the general concern for the condition of the Midland Highway. In his submission, Mr Roger Valentine called for the Midland Highway to be upgraded to a four-lane carriageway, describing it as the "*Midland track*". [452] Mr Valentine said:

> "*The lives that it would save I think is quite dramatic. I repeat, if you look at 2008 and the number of head-on collisions on the Midland 'Highway', it's a clear indication*."[453]

Upgrading the Midland Highway to a four-lane carriageway was not universally supported. The Committee asked Keith Midson (Midson Traffic) whether the Midland Highway ought to be upgraded into a four-lane divided highway. Mr Midson said traffic volumes are insufficient:

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[447] Cairney *et al*, transcript of discussion, 28 January 2009, p. 10
[448] Job and Elliott, transcript of discussion, 2 February 2009, p. 9
[449] Job and Elliott, transcript of discussion, 2 February 2009, p. 9
[450] Taskunas and Bridges, transcript of evidence, p. 61
[451] Taskunas and Bridges, transcript of evidence, p. 61
[452] Valentine, submission, p. 1; Valentine, transcript of evidence, 24 March 2009, p. 21
[453] Valentine, transcript of evidence, 24 March 2009, p. 22

> "*I don't think it's warranted, to be honest. We don't have the volume. The volume drops off; it is something in the order of about 6,000 vehicles per day in the middle and it grows right through to about 40,000 on the Brooker Highway, from memory. Most of the traffic at the northern and southern ends is more localised with people doing the short to medium journey trips, like Hobart to Brighton or Hobart to Granton or something like that. Not everyone is going all the way through to Launceston or beyond to the Bass Highway, so it is very difficult to justify from an economics point of view to build the four lanes.*"[454]

Mr Norm McIlfatrick (Secretary, DIER) similarly cited traffic volumes as the determining factor:

> "*The policy is not to have a four-lane divided all the way [sic]. Any significant upgrade works that are either road safety generated or by-pass generated will take into account the volumes of traffic on the road and will certainly incorporate lane barriers. Whether that is a two-lane, a three-lane with an overtaking lane, or a four-lane, will be determined by the volumes on the road.*"[455]

However, in the Committee's view, traffic volumes should be secondary to lives potentially saved and a reduction of serious injuries. The issue is not that of finance but of reducing the number of serious casualty crashes. As stated in the *Interim Report*, current traffic volumes and financial considerations should not dominate discussions on this subject. Rather, discussions should be based more on a potential to save lives and to reduce the number of serious injuries if the Midland Highway were to be a divided four-lane highway.

On that fateful day of 9 July 2009, nine people lost their lives on Tasmanian roads. Seven of them died in head-on collisions on just two sections of the Midland Highway. These particular collisions could not have occurred if the Midland Highway had been a divided four-lane highway. Many other serious casualty crashes could also have been avoided if the Midland Highway had been so divided.

What is now so obvious is that a program is needed to progressively transform the Midland Highway into a four-lane divided highway to prevent further needless loss of life.

The Tasmanian Infrastructure Strategy earmarks upgrades to the Midland Highway, including bypasses of Brighton and Bagdad, though does not show any intention in the foreseeable future of upgrading the highway to a divided carriageway along its entire length.[456]

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[454] Midson, transcript of evidence, 27 March 2009, p. 32

[455] McIlfatrick *et al*, transcript of evidence, 26 March 2009, p. 18

[456] 'Transport Infrastructure: Key Activties', at <http://www.infrastructure.tas.gov.au/transport/key_activities> [accessed August 2010]; see also 'Midland Highway Strategic Directions', at <http://www.infrastructure.tas.gov.au/transport/key_activities>

Avoidance Barriers

Mr Brendan Thompson (Stay Upright Tasmania) described wire rope barriers as being "*absolutely dangerous*" for motorcyclists.[457] Mr Paul Bullock (Secretary, Tasmanian Motorcycle Council) said that wire rope barriers have a 'cheese-cutter' effect when impacted by a motorcyclist:

> "*What seems to happen is the bike wheel will be grabbed by the post or the wire and the rider gets catapulted forward onto the other post. That is where the problem is.*"[458]

He also said:

> "*You are riding up the road and there is the metal barrier. If you hit that, you are going to slide along it. If you hit a wire rope one it grabs you. It grabs the foot-pegs, it'll grab the front wheel and throw you off – you don't have a chance. But if you hit a cement one, you will slide along it. You might have a broken leg, broken foot, but you will be a lot healthier than if you hit a wire rope barrier. The wire rope is not just bad for motorcyclists it is also bad for a low-slung sports-type car – it will go under it.*"[459]

Mr Bullock tabled a document under the TMC's letterhead entitled "*Unsafe Wire Rope Barriers Facts*", which asserted that:

- Wire rope barriers have been "*banned, removed or modified*" in the Netherlands, Norway, Britain, Austria, France, Germany and Portugal;
- A MUARC report has commented that '*barriers with a smooth continuous surface represent less of a safety hazard to motorcyclists*';
- "*Low-fronted vehicles can go under lowest wire rope, can be dangerous to recovery personnel;*" (sic) and
- "*Lack of maintenance makes barriers unsafe.*"[460]

Mr Bullock also said that whilst wire rope barriers are cheaper to install, they have a lifespan of 20 years compared to a cement barrier having a lifespan of 50 years.[461]

Mr Tony Hennessy said Brifen fencing is a "*very good piece of design*" though, in his view, "*the way to make it safe… is to put a reasonably solid plastic cover over it that goes to the ground*" to mitigate the cutting effect on motorcyclists and to prevent the wire having a clothes line-effect on low-fronted cars.[462] Ms Angela

[457] Thompson, transcript of evidence, 14 October 2008, pp. 114-115
[458] Bullock, transcript of evidence, 21 October 2008, p. 21
[459] Bullock, transcript of evidence, 21 October 2008, p. 22
[460] Document d.24
[461] Bullock, transcript of evidence, 21 October 2008, p. 16 and p. 27
[462] Hennessy, transcript of evidence, 22 October 2008, p. 40

Conway said the Department has placed stack cushions around posts and rub rails for w-beam barriers to improve survivability when a motorcyclist impacts. [463]

The Committee met with Mr Paul Hansen from Brifen Australia to discuss the performance of wire rope barriers as a road safety device. Mr Hansen explained what happens when a vehicle impacts with a wire rope barrier:

> "*When the vehicle enters the fence the vehicle crumples or deforms round the rope. It will deflect to a point that the energy of the incoming vehicle is matched by the energy that is built up in the ropes. At that point the ropes will guide the vehicle out. The angle of exit is dependent on several things: the type of road surface, the angle of entry and the vehicle itself. Typically the vehicle will come out – this is driverless, with no control over the wheel – the front wheels will be dragging and turn towards the fence, it will re-enter, hit again and drive off.*"[464]

Mr Hansen said that placing plastic tubes around fence posts, whilst "*extremely good for motorcyclists*", when hit by a car the "*tubes went everywhere and the danger of a secondary accident was considerable*."[465] He said he was aware some European countries have ceased using wire rope barriers as "*a political move to gain votes*".[466]

The Committee specifically asked Mr Hansen about the effect wire rope has when struck by a motorcyclist. He said in response:

> "*I can tell you that I have had one positive call from a cyclist. He impacted a fence outside of Alice Springs in 1997. He was driving on a Ducatti 916, travelling at 140 km/h. He impacted at an angle of 40 degrees, which is very steep indeed. It was he who phoned me. He had spent six months recovering, but his words were that he'd dropped the bike, he slid in and took the full impact on his shoulder. He cartwheeled down; his body took out three posts; his bike similarly took out three posts. His words were, 'If it had been a guard rail post I'd be dead because it does not yield'.*"[467]

Views in support of installing wire rope barriers were also presented to the Committee from other sources. The RACT's submission, for example, recommended:

> "*That wire rope centre barriers be installed on all divided highways and on all three lane sections of highway to eliminate head on and run off the road on the right crashes on these sections of road.*"[468]

Mr Keith Midson said motorcyclists are vulnerable when a crash occurs regardless of what is collided with:

> *"…It really doesn't matter what a motorcyclist hits if they are travelling at speed, they have a very high probability of being killed, whether it is w-beam,*

[463] McIlfatrick *et al*, transcript of evidence, 26 March 2009, p. 22
[464] Hansen, transcript of discussion, 2 February 2009, p. 2
[465] Hansen, transcript of discussion, 2 February 2009, p. 4
[466] Hansen, transcript of discussion, 2 February 2009, p. 6
[467] Hansen, transcript of discussion, 2 February 2009, p. 4
[468] RACT, submission, p. 10

wire rope barrier, concrete barrier or a tree, because of the lack of protection that they have compared to a car which has airbags and a steel cage around you. It really doesn't matter what they hit, they have a high likelihood of being killed. That is very unfortunate and very difficult to deal with."[469]

A MUARC report sponsored by the ATSB (Australian Transport Safety Bureau) on motorcycle safety barrier crash-testing, in discussing the safety performance of different barrier types, has stated:

"*There has been no comprehensive crash-testing program that has compared the safety performance of a number of different barrier types in controlled conditions with respect to motorcyclists, therefore it is difficult to make meaningful comparisons of barrier types regarding this issue. In general, however, it appears that barriers with a smooth, continuous surface (located reasonably close, and oriented roughly parallel, to the traffic stream) represent less of a safety hazard to motorcyclists as they better allow the rider to slide along the surface of the barrier without the danger of impacting any sharp edges or corners that can concentrate the impact force.*"[470]

Roadside Fixtures and Hazards

The term 'roadside fixtures and hazards' relates to objects beside roads such as poles, trees, posts, fences directional and traffic signs, ditches, steep terrain, verges and other inanimate physical objects.

Managing roadside hazards is an important feature of the safe systems approach to road safety, as described earlier in this report, because this approach requires road environments to be forgiving to drivers in the event of a vehicle leaving the road. In the Committee's view, there are too many instances in Tasmania where poles and trees are situated close to the road edge.

Dr Bruce Corben (MUARC) said that, particularly in rural settings, the problem is vehicles leaving the road to the left or right and hitting poles and trees or perhaps rolling over or colliding head-on with oncoming vehicles. He said:

"*You might only need to get one wheel into the gravel and that can be enough to lead to loss of control, which then results in very severe impacts with roadside trees and embankments, overturning, and so on. Those kinds of issues can be a real concern in rural settings where speeds are high and road quality is not always as good as we'd like*."[471]

Mr Robin Eccles expressed a similar view, saying that crashes on country roads are becoming more of an issue than crashes in city environments.[472]

[469] Midson, transcript of evidence, 27 March 2009, p. 30
[470] Duncan *et al*, *Motorcycle and Safety Barrier Crash-Testing: Feasibility Study* (ATSB/MUARC, Canberra, 2000), p. 2
[471] Mitsopoulos-Rubens *et al*, transcript of discussion, 28 January 2009, pp. 18-19
[472] Eccles, transcript of evidence, 14 October 2008, p. 48

The Committee sought statistical information from DIER relating to the numbers of urban and rural fatal crashes. The Department advised that it "*does not record urban and rural as a category*".[473]

Ms Angela Conway explained to the Committee that DIER uses a manual called the Road Hazard Management Guide that stipulates the need for providing clear zones alongside roads so that "*vehicles that are out of control have some space to go*."[474] According to this document:

> "*The intention of this Guide is to address road safety elements that focus on 'keeping vehicles on the road' and 'dealing with errant vehicles' on the occasion that vehicles leave the carriageway. This document aims to address many of the issues related to road safety in road design, and direct practitioners to appropriate design standards and practices*."[475]

The placement of signage, she said, requires DIER's approval in accordance with the Guide.[476] The Guide itself states:

> "*The ideal roadside environment would be completely free of any obstructions to the safe passage of errant vehicles. … However, it is usually not possible to construct a road environment completely free of hazards. There is usually a requirement for signage, utility poles and other roadside furniture, and often the topography of the landscape necessitates the provision of cut or fill embankments.*"[477]

The Committee believes there are too many instances where roadsides in Tasmania are not cleared of hazards nor protected by barriers and that the policy contained in the Guide is not being applied consistently.

Mr John Youl submitted that at roundabouts, signs and plants are at "*exactly the wrong height*", tending to obstruct drivers' vision and, in his view, should be removed.[478]

The Guide contains various specific and summarised examples of roadside hazards and the relevant treatments:

> "*For the purpose of hazard identification, the types of hazard that may be encountered in roadsides can be divided into five broad categories:*
>
> - *Embankments;*
> - *Rigid objects – trees, utility poles, culvert end-walls etc;*
> - *Medians (cross median crashes);*
> - *Open drains; and*
> - *Bodies of water.*

[473] Information provided by DIER, 17 March 2009
[474] McIlfatrick *et al*, transcript of evidence, 26 March 2009, p. 50
[475] DIER, 'Road Hazard Management Guide' [undated], p. 1
[476] McIlfatrick *et al*, transcript of evidence, 26 March 2009, p. 50
[477] DIER, 'Road Hazard Management Guide' [undated], p. 9
[478] Youl, submission, p. 5

Notwithstanding that there are physical, environmental and economic constraints, the preferred treatments (in order of preference) of roadside hazards are:

- *Removal;*
- *Relocation to reduce the chance of them being hit;*
- *Redesign so that they can be safely traversed;*
- *Redesign to be frangible or break away, or to otherwise reduce severity;*
- *Shielding with a traffic barrier or impact attenuator; and*
- *Delineation of the hazard.*

Each option for hazard reduction is to be ranked according to benefit cost analysis techniques and engineering judgement."[479]

The RACT's submission called for:

"*The replacement of roadside light poles with frangible poles, removal of utility poles in crash locations, and removal of roadside obstacles or installation of barriers*."[480]

All four of the RACT's suggestions are already contained in the Road Management Hazard Guide, as can be seen by referring to the excerpt from the Guide above. However, Dr Jeremy Woolley (Senior Research Fellow, CASR) commented that some road authorities do not take advantage of new methods or new technology when replacing or repairing infrastructure:

"*What annoys me is when you go out on the road and you see these old treatments repaired in the same fashion, not actually upgraded or made better. They are merely repaired to present the same hazard as existed before*."[481]

Any Government policy that considers road upgrades or repairs using contemporary treatments should be clearly articulated to road designers and engineers to enhance road safety and to minimise the effects of roadside fixtures and hazards.

Skid Resistance

Mr Ralph Rallings, a former engineer, provided the Committee with detailed information pertaining to skid resistance levels on Tasmanian road surfaces. He said that as skid resistance levels decline this would correlate with an increase in road crashes, particularly during wet weather periods. "*There are some recent Tasmanian studies that show a tenfold variation in wet road accident rates across the skid resistance spectrum*," he said.[482] Dry periods could also lead to reduced

[479] DIER, 'Road Hazard Management Guide' [undated], p. 12
[480] RACT, submission, p. 10
[481] Anderson *et al*, transcript of discussion, 30 January 2009, p. 11
[482] Rallings, transcript of evidence, p. 2

skid resistance on some surfaces, he said, because the surface becomes polished leading to more crashes in summer than winter.[483]

DIER indicated that skid resistance is continually monitored and roads are resealed as required. Mr Peter Todd (General Manager, Roads and Traffic, DIER) explained the process used for testing and monitoring skid resistance:

> "*We do test the road with a very sophisticated piece of equipment, which you may see travelling around from time to time, which has a tyre which goes onto the road, water is sprayed in front of that tyre and it measures the resistance of that tyre. It is on a very large truck with a very big water tank and we actually measure the skid resistance of that road. We measure it in both wheel paths and we actually analyse the roads and that informs our areas for resealing, particularly skid resistance, because when we come to road safety the interaction between tyre and road is absolutely fundamental and so that is a very big focus. We have a significant resealing program, around $8 million a year, and a large portion of that is targeted to ensuring that the skid resistance of our road is up to standard and is delivering a resistance that a driver should expect on the road.*"[484]

Road surfaces are measured in terms of their 'investigatory levels' (ILs) for determining whether resealing is required. If the road surface reaches a specified investigatory level, this triggers a closer review of the surface condition.

According to Mr Rallings' submission, a consultant report commissioned by DIER found "*an arbitrarily 'acceptable' accident rate of 20 or 21 wet road accidents/100 million vehicle kilometres/year*," which has been applied to all road categories. "*I suspect that a benefit/cost approach to the setting of ILs is preferable to the use of an arbitrarily 'acceptable' accident rate*," his submission stated.

Whilst Mr Rallings provided the Committee with detailed quantitative evidence in his submission to demonstrate a correlation between skid resistance levels and crash events, he refrained from directly asserting that skid resistance levels have had a causal relationship with crashes, although at one point he made this suggestion:

> "*It surprises me at times that people talk about the accident rate going up and people are blaming lack of policing and all other sorts of things but to me the first thing you would look at is have you had a dry period or not*."[485]

Indeed, even if Mr Rallings has established a correlative linkage, without additional detailed analysis a general causal linkage between skid resistance and road crashes is difficult to prove. Some crashes will have occurred for reasons unrelated to skid resistance – alcohol and drugs for instance – and other crashes may be partly, though not exclusively, caused by poor skid resistance. An organisation with greater resources at its disposal could examine a sample of road crashes case-by-case and test the correlation Mr Rallings has observed.

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[483] Rallings, transcript of evidence, p. 3, p. 6 and p. 8; see also, Rallings, submission
[484] Todd *et al*, transcript of evidence, 14 October 2008, p. 12
[485] Rallings, transcript of evidence, p. 7

Despite there being some uncertainty around a direct causal link between skid resistance levels and road crashes, evidence given to the Committee does indicate that the skid resistance of some Tasmanian roads could be below a safe standard. It is therefore arguable, at least, that there is some relationship between road crashes and poor skid resistance.

Road Markings

The Committee has been concerned by recent media coverage drawing attention to worn line markings on Tasmanian roads, particularly at urban intersections.[486]

In addition to cases where lines have become worn away, witnesses brought to the Committee's attention the invisibility of road lines during wet conditions at night. Mr Ralph Rallings submitted that in wet conditions at night, lines could be "*impossible to see*" and drivers are "*intimidated by wheel spray*."[487] Mr Greg Hyland submitted:

> "*One does not have to be a stranger to this type of situation to become disoriented by the glare of headlights on a wet roadway, and end up in the wrong lane, head-on with a truck* [sic]."[488]

Mr Rallings suggested the choice of road surface aggregate would be a solution:

> "*If night time visibility was taken very seriously, then I suspect that light-coloured aggregates would come into favour. They would have the dual benefits of improving visibility and possibly reducing lighting costs*."[489]

Mr Hyland submitted that the identification of traffic lanes could be improved "*with more use of 'cats' eyes'*."[490] In evidence, he added that having "*gold or yellow paint on the road rather than white*" would be another potential solution.[491]

The Committee calls for more funding to ensure road markings are properly visible and an increased proliferation of reflective cats' eye devices on Tasmanian roads to improve visibility during rainy conditions at night.

[486] McKay, Dannielle, 'Lives at Risk – RACT', *Mercury*, 8 July 2010, p. 4
[487] Rallings, submission, p. 3
[488] Hyland, submission
[489] Rallings, submission, p. 3
[490] Hyland, submission
[491] Hyland, transcript of evidence, 21 October 2008, p. 31

Findings

The Committee found that –

49. Fixtures adjacent to roads without avoidance barriers constitute potential hazards to road users.

50. The AusRAP program provides design standards that if adopted could significantly improve the quality and safety of Tasmanian highways.

51. On many sections of the Midland Highway, the surface condition has deteriorated to an unacceptable extent.

52. Road maintenance of many Tasmanian roads has been inadequate.

53. The progressive upgrading of the Midland Highway to a divided carriageway, along its entire length, would reduce the risk of head-on crashes.

54. Ongoing research is needed to determine the most appropriate type of avoidance barriers to use throughout the road network.

Recommendations

The Committee recommends that –

37. The Midland Highway be progressively upgraded to a four-lane divided carriageway along its entire length.

38. The State Government develop a rolling ten-year strategy to facilitate the recommended upgrade of the Midland Highway.

39. Upgrades, repairs and maintenance undertaken on Tasmanian roads should be evaluated prior to commencement to ensure contemporary treatments and infrastructure is applied.

40. Government support be provided for research into the most appropriate types of avoidance barriers.

14 CYCLISTS

Cycling groups presented two main areas of concern to the Committee: firstly, the need for infrastructure to accommodate growing numbers of cyclists, and secondly, a need to improve relations between motorists and cyclists.

The following table shows cyclist fatalities and serious injuries in Tasmania from 2000 to 2009.

Cyclist Fatalities and Serious Injuries, Tasmania, 2000-2009[492]		
	Fatalities	Injuries
2000	0	12
2001	1	14
2002	0	8
2003	0	13
2004	2	14
2005	1	16
2006	1	11
2007	2	5
2008	0	8
2009	2	11
TOTAL	8	112

The Tasmanian Bicycle Council submitted that infrastructure should be provided for cyclists:

> "*There are many options for cycle-specific infrastructure and road design that are both widely accepted and currently in use… policies should [be] adopted at all levels of government that ensure cycle-specific infrastructure and road design are incorporated in all new road developments and maintenance or upgrading of the current network.*"[493]

Mr Keith Price (Chair, Safer Roads for Cyclists Tas Inc) and the Tasmanian Bicycle Council both called for a change of culture to ease tension between cyclists and motorists. Mr Price said:

> "*Too often in discussions that occur rightly or wrongly the motorist blames the cyclist and the cyclist blames the motorist instead of saying, 'Hang on, we are in this together'.*"[494]

The Bicycle Council submitted that change is needed "*to dispel many of the current misconceptions and lack of understanding*" between motorists and cyclists that could "*cause unwarranted angst between the two road user*

[492] Information provided by DIER, 17 March 2009; DIER, 'Tasmanian Crash Statistics', at <http://www.transport.tas.gov.au/safety/crash_statistics> [accessed September 2010]
[493] Tasmanian Bicycle Council, submission, p. 2
[494] Price, transcript of evidence, 24 March 2009, p. 39

groups."[495] Mr Tim Stredwick (Tasmanian Bicycle Council) elaborated on this point:

> "*I think, for a number of reasons, that the road safety approach should not only be reactive but also proactive. Where that relates to cyclists is that, given the increasing number of cyclists on our roads, there will be, but I think that it can be hastened along, a cultural change of attitude on our roads to be generally more cooperative and considerate towards cyclists.*"[496]

He said there should be an awareness campaign targeted at motorists and cyclists based on the principle of sharing the road.[497] The Bicycle Council's submission stated:

> "*A cultural change on our roads is required to dispel many of the current misconceptions and lack of understanding between motorists and cyclists… The Tasmanian Bicycle Council recommends that a comprehensive motorist/cyclist Share the Road campaign be developed using the model successfully applied by the Road Safety Task Force. Television advertisements, roadside signs, leaflets enclosed with registration and/or driver licence renewal notifications, etc.*"[498]

Mr Stredwick also told the Committee there is value in adult cycle training:

> "*I have been involved with putting probably 150 to 200 cyclists through the courses that Cycling South run and then have seen those cyclist as local people around town and talked to them about how they are going. There is no hard evidence but I am convinced that it is a fantastic thing*."[499]

He also said that ideally, such training should be extended to primary school children:

> "*Given an unlimited budget, I would like to see such adult cycle training being either heavily subsidised or free because one of the difficulties is getting people to do the courses. … I would extend that further to include bike education which is an established primary-school-age cycling safety program. … I would like to see that as an integral part of every grade 5-6 child's education*."[500]

The Australian National Cycling Strategy, which Tasmania has endorsed, cites as priorities (among other things) the need to enable and encourage safe cycling through actions including "*behavioural initiatives that improve cyclist safety*" and "*initiatives that improve all road users' awareness of how they can share the road with cyclists*."[501] It does not specifically mention a course of cycle training for adults and children. The main focus of the strategy appears to be increasing participation, given that at the 2006 Census, for instance, only 1,478 Tasmanians

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[495] Tasmanian Bicycle Council, submission, p. 2
[496] Stredwick, transcript of evidence, 27 March 2009, p. 8
[497] Stredwick, transcript of evidence, 27 March 2009, p. 9
[498] Tasmanian Bicycle Council, submission, p. 2
[499] Stredwick, transcript of evidence, 27 March 2009, p. 14
[500] Stredwick, transcript of evidence, 27 March 2009, p. 14
[501] 'The Australian National Cycling Strategy 2005-2010', Austroads [undated], pp. 20-21

indicated they used bicycles as their primary means to travel to work compared with 125,486 people who drove their car.[502]

[502] ABS, 'Method of Travel to Work (Full Classification List) by Sex', 2068.0

Findings

The Committee found that –

55. Cyclists are a vulnerable group of road users.

56. There is a lack of public awareness and understanding of the rights of cyclists as road users.

57. There is a lack of education and training programs for cyclists to prepare them for sharing the road network.

58. Consideration for cyclists in road design, upgrading and maintenance has been generally inadequate.

Recommendations

The Committee recommends that –

41. Public awareness campaigns be implemented to better inform all road users of specific issues related to cyclists.

42. Education and training programs for cyclists be developed and implemented at primary school level and for all cyclists using the road network.

43. Planning for cycleways be considered in road design, upgrading and maintenance.

15 CASUALTY RECOVERY AND REHABILITATION

When a road crash occurs, casualty rescue and recovery by the emergency services in Tasmania is carried out pursuant to the Tasmanian Road Accident Rescue Arrangements (TRARA). These Arrangements stipulate the "*roles and functions of organisations involved in road rescue, service expectations, and the minimum requirements of service providers*."[503]

Four main agencies respond to "*road accident rescue*" (RAR) incidents: Tasmania Police, the Tasmanian Ambulance Service (TAS), the Tasmanian Fire Service (TFS), and the State Emergency Service (SES).[504] Each agency has particular powers and responsibilities at a crash scene. In addition to describing the role of each service, the TRARA also includes matters related to incident command and control, dispatch protocols, crewing requirements, response areas, debriefing, training and equipment.[505]

According to the TRARA, patient care at the scene of a crash is the primary responsibility of the TAS. Mr Mike Brown (TFS) told the Committee that in the event of "*imminent danger*" of fire or drowning, "*then our people will do what they have to do to get the patient out into a safe area*."[506] He added:

> "*We will under the vast majority of circumstances not extricate the patient but if we are observing that the patient, for example, cannot breathe or has serious bleeding injury our people have first aid qualifications again up to a Public Safety Training package standard and can render that initial first aid assistance*."[507]

He said that whilst "*the advanced life supports are most certainly left with advanced skills of the ambulance officers*,"[508] there are times when TFS officers might commence CPR on a patient. According to the TRARA, "*all emergency personnel when first on scene will provide emergency first aid within the scope of their training.*"[509]

Mr Dave Dannals, a former paramedic, said that first aid knowledge and/or training would prevent people from dying by roadsides as a result of bleeding and/or blocked airways.[510] His submission *inter alia* recommended that first aid training should be "*compulsory before acquiring a licence*".[511]

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[503] State Road Rescue Committee, 'Tasmanian Road Accident Rescue Arrangements', August 2007 (version 1.5), p. 4 (document d.129)
[504] State Road Rescue Committee, 'Tasmanian Road Accident Rescue Arrangements', August 2007 (version 1.5), p. 6 (document d.129)
[505] State Road Rescue Committee, 'Tasmanian Road Accident Rescue Arrangements', August 2007 (version 1.5), pp. 8-10 (document d.129)
[506] Salter and Brown, transcript of evidence, 6 May 2009, p. 39
[507] Salter and Brown, transcript of evidence, 6 May 2009, p. 40
[508] Salter and Brown, transcript of evidence, 6 May 2009, p. 40
[509] State Road Rescue Committee, 'Tasmanian Road Accident Rescue Arrangements', August 2007 (version 1.5), p. 8 (document d.129)
[510] Dannals, transcript of evidence, 6 May 2009, p. 59
[511] Dannals, submission, p. 4

More generally, advances in medicine and technology have had some contribution to the reduction of the road toll.[512] Mr Peter Morgan (TAS) said:

> "*Management of incidents for paramedics has improved significantly and the Tasmanian Ambulance Clinical Council, who are our governing body, has been very progressive in the types of skills and drugs we are allowed to use*."[513]

Another problem immediately following a crash is the possibility of vehicles catching fire with people trapped inside. Mr Mike Brown stated that although a low percentage of crashes since 2006 have involved vehicles catching fire, motor vehicles should preferably carry fire extinguishers.[514]

Following extrication, patient care moves from emergency services on the ground to hospitals and into the care of medical professionals. Mr Andrew O'Brien (TAS) said the role of paramedics is to keep the patient alive and into a holding pattern until reaching hospital in preparation for surgery.[515]

Dr Bill Griggs (Head of Trauma, Royal Adelaide Hospital) said that, in South Australia, ambulance crews photograph crash scenes to identify the manner in which patient injuries occur. He said the nature of the injuries of some crash victims are quite obvious and are apparent to any observer. However, this is not always the case and, as Dr Griggs pointed out, in such situations crash scene photographs often provide medical staff with more information regarding the severity of the impact sustained in the crash thus indicating the possibility of a patient having concealed internal injuries.[516]

He explained:

> "*The ones who are a problem are those who appear to be uninjured, but actually have something serious going on inside. This is just another clue; it is another tool in the whole thing. The ambulance officers get to see the scene in reality; it just gives the medical staff a different perspective*…"[517]

Dr Griggs added that "*those pictures are then taken away and destroyed*" to prevent them being used in litigation.[518]

Whilst services exist to treat physical injuries following a crash, services for patients to address psychological and emotional consequences of crashes are generally not as well provided for. The Road Trauma Support Team Inc, an organisation based at the Launceston General Hospital, is one of a number of organisations that provide counselling services to people affected by road crashes. Ms Robin Ikin (President, Road Trauma Support Team) said:

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[512] Small, *et al*, transcript of discussion, 30 January 2009, p. 19;
[513] O'Brien and Morgan, transcript of evidence, 6 May 2009, p. 83
[514] Salter and Brown, transcript of evidence, 6 May 2009, p. 43
[515] O'Brien and Morgan, transcript of evidence, 6 May 2009, p. 80
[516] Small *et al*, transcript of discussion, 30 January 2009, pp. 20-21
[517] Small *et al*, transcript of discussion, 30 January 2009, pp. 20-21
[518] Small *et al*, transcript of discussion, 30 January 2009, p. 21

"*We exist because we recognise that people have psychological and emotional needs after trauma. It's often just assumed once the body is knitting together okay that the person is going home and that they'll be alright*."[519]

The Committee asked Dr Robert Walker (AMA Tas) what long-term care is provided for people after a crash. He said:

"*People get taken into casualty, there is all the shouting happening and all the bright lights and all the drama happening and bones are refixed and lives are saved. You are quite right; they then get sent home and who is there following it on? There is a vacuum.*"[520]

Ms Ikin also stated:

"*The hospitals are so busy with their service provision of the necessities of just keeping people alive and dealing with the acute aftermath that they often don't have the time to even think about things like psychological or emotional impact*."[521]

Following immediate care, crash victims (depending on the extent and nature of their injuries) might require care and treatment indefinitely. The Motor Accidents Insurance Board (MAIB) manages a compulsory personal injury insurance scheme for Tasmanians on a no-fault basis, providing benefits to people injured in road crashes.

Tasmania is one of three jurisdictions in Australia that provides no-fault benefits to people with catastrophic injuries (an injury, usually permanent, resulting in a profound loss of bodily system or function). "*To illustrate this point*," the MAIB's submission stated, "*a person catastrophically injured in Queensland, South Australia, Australian Capital Territory and Western Australia who cannot prove negligence against another person is ineligible for CTP benefits*."[522]

The MAIB provided the following comparison of CTP (compulsory third party) schemes in Australia, shown below.

Australian CTP Schemes Comparison[523] (at February 2010)								
	TAS	VIC	NT	NSW	QLD	WA	SA	ACT
No-Fault	Yes*	Yes*	Yes	No	No	No	No	No
Common Law Rights	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Monopoly Scheme	Yes	Yes	Yes	No	No	Yes	Yes	No
Motor Car	$344	$390	$458	$403+	$337+	$245	$444	$416

[519] Lunson and Ikin, transcript of evidence, 25 March 2009, p. 31
[520] Walker and Steven, transcript of evidence, 26 March 2009, p. 97
[521] Lunson and Ikin, transcript of evidence, 25 March 2009, p. 31
[522] MAIB, submission, p. 2
[523] MAIB, 'Organisational Overview', February 2010, p. 3; Email dated 20 August 2010 from Mr Peter Roche (CEO, MAIB)
* Includes lifetime care and support for catastrophically injured

Premium[#]								

The MAIB also provides funding for road safety projects in Tasmania, such as:

- $3.16 million indexed for the Road Safety Task Force over three years from January 2009;
- A $3 million contribution towards 11 projects to fix black spots on local roads; and
- Subsidisation of a skills refresher course for motorcyclists.[524]

The MAIB outlined in its submission the types of long-term care and benefits provided to claimants following a road crash to alleviate suffering:

> "*In Tasmania, 'daily care' claimants (those who require at least two hours of care per day for an indefinite period) and are not subject to any monetary limit for their ongoing expenses for care, rehabilitation and treatment. … The MAIB's role is to fund the cost of care, treatment, etc, and funds are set aside for each claim from the outset. … In 2007-08 a purpose-built residence for the seriously injured was constructed in Ulverstone which complements existing group residences in both Hobart and Launceston. … One of the objectives of the MAIB's long-term care program is to foster the independence of residents. To support this objective, 'transitional' units have been constructed on existing complexes. This allows a person who is progressing towards independence the opportunity to do so in a supportive environment prior to moving back into the community. The units also provide a valuable role in filling a gap which often exists when people are ready for discharge from hospital but renovations to their own home may not have taken place or been completed. … The 'daily care' provisions were introduced in 1991 and Tasmania is regarded nationally as a leader in the field. MAIB funds rehabilitation (including occupational therapy, case and vocational rehabilitation) for both short and long-term claimants who require assistance either in activities of daily living or returning to work*."[525]

Dr Robert Walker commended the MAIB:

> "*In the families that I have had that have had serious injuries and they have lost sons and daughters and even been seriously injured, the MAIB follow-up to the ones that are seriously injured has been incredibly good. They accommodate them in proper units, they will make alterations to houses and they will organise ongoing care and things like that.*"[526]

The Committee sought information from the MAIB in relation to compulsory third party (CTP) claims received and paid.

[+] Maximum allowable
[#] Inclusive of GST
[524] MAIB Annual Report 2008-09 p. 10
[525] MAIB, submission, p. 2.; MAIB, 'Organisational Overview', June 2008 (submission 25a), pp. 12-16
[526] Walker and Steven, transcript of evidence, 26 March 2009, p. 98

MAIB: Claims Received and Claim Payments,[527] 2000-2010		
	Numbers of Claims	Claim Payments ($ million)
2000-01	3,679	68.9
2001-02	3,655	73.3
2002-03	3,609	68.1
2003-04	3,386	73.0
2004-05	3,385	68.1
2005-06	3,315	62.1
2006-07	3,383	67.8
2007-08	3,277	75.3
2008-09	3,367	74.4
2009-10	3,053	77.7
Note: Claim payments do not necessarily correlate with claims received in the same year, as claims may be paid out over many years.		

Total Number of Claims Received Categorised by the Subsequent Value of Payouts, 30 June 1998 to 31 December 2009[528]	
<$10,000	33,442
>$10,000 and <$100,000	4,769
>$100,000 and <$500,000	1,278
>$500,000	180

Mr Tony Hennessy suggested that MAIB premiums should be priced to penalise drivers who show a tendency to have crashes:

> "*I believe we really do need to have a reward and punishment system for people who are doing the right or the wrong thing on the road. I see the MAIB premium at the moment being neither. I believe we have a fantastic MAIB program but the premium has absolutely no relationship to the driver; in fact, it almost works the opposite way by being applied to separate vehicles rather than being applied to the driver. …The MAIB premiums should be applied to the driver and part of the driver's licence so that, like all insurance, it can contain an element of risk and over a period of time good drivers will receive a reduction in their MAIB premium for not causing concerns on the road while those people who are causing concern should be punished and frankly punished quite heavily if they are breaking regulations severely*."[529]

The Committee discussed this proposition with the MAIB, asking Mr Peter Roche (CEO, MAIB) whether premiums should vary depending on a person's driving record. He said:

> "*If you had a situation where 450,000 cars and 445,000 of those people didn't have an accident and were required to have a no-claim discount, you wouldn't be able to increase the premiums on the 5,000 errant drivers to the extent where you could give any meaningful discount to the 99 per cent of*

[527] Information provided by MAIB, 29 January 2009 and 9 July 2010
[528] Information provided by MAIB, 29 January 2009 and 9 July 2010
[529] Hennessy, transcript of evidence, 22 October 2008, p. 27

drivers. In a strange way you would almost have to increase premiums to give drivers a discount. Such is the difference in numbers between the vast majority who don't have an accident and the very small number who do."[530]

Mr Gordon Humphreys (Chairman, MAIB) said:

"*It is the vehicle that pays the premium. The premiums are levied on motor cars. … If you want to levy it on the skill of the driver, that is a legislative matter that obviously somebody would have to deal with*."[531]

Mr Roche thereafter commented:

"*I would suggest that on the figures the MAIB premium is pretty good value compared to the other States, and I can tell this committee that in some other States in Australia they do look on this scheme favourably, particularly with the benefits that we provide on the one hand and the premium we charge on the other. I would hate to think that we would have to have an army of people to rate people because of their age or where they live or what they might have done. I think it would be almost revenue neutral, but we would create a lot of work doing it*."[532]

Mr Humphreys added:

"*I think the other thing to bear in mind is that we are talking about a body that has to insure everybody. In New South Wales, there are a lot of private insurers. If you have private insurers you can have what you like, because the private insurers can pick and choose who they will insure and how much they will charge for the insurance. They offer insurance and they charge a fee for it. … We have to insure everybody and anybody. You have to always bear that in mind when you start talking about fairness.*"[533]

[530] Roche and Humphreys, transcript of evidence, 22 October 2008, p. 110
[531] Roche and Humphreys, transcript of evidence, 22 October 2008, p.112
[532] Roche and Humphreys, transcript of evidence, 22 October 2008, p. 113
[533] Roche and Humphreys, transcript of evidence, 22 October 2008, p. 113

Findings

The Committee found that –

59. The current arrangements regarding the emergency services' response to road crashes is appropriate.

60. A significant number of road crash victims die at the scene as a result of an obstructed airway and/or bleeding.

61. Basic first aid delivered at the scene can improve outcomes for road crash victims.

62. The Motor Accidents Insurance Board's 'no-fault' insurance policy operates efficiently and effectively for victims of road trauma and meets the long-term health needs of those with catastrophic injuries.

63. The MAIB contributes substantial funding to road safety, to awareness and to police operations.

Recommendations

The Committee recommends that –

44. Approved first aid courses be offered to all applicants for a driver's licence of any class in Tasmania, with a financial incentive provided to those who complete such a course.

45. Carriage of a secured fire extinguisher in all vehicles be encouraged.

46. Wherever practicable, ambulance service personnel photograph crash scenes to assist other emergency medicine practitioners in the identification of injuries that may not be otherwise apparent.

47. Adequate resources and services be made available to treat the psychological and emotional consequences of road crashes.

16 OFF-ROAD MOTORCYCLES

Evidence on this Term of Reference came from a diverse range of stakeholders who all provided distinctive perspectives on the issue. These ranged from a surgeon dealing with injuries occurring as a result of frequent off-road crashes; managers of forest reserves; nature reserves and public land; law enforcement agencies and individuals and organisations who engage in motorcycling activities.

The key issues identified were the significant number of injuries emanating from crashes occurring in mostly unregulated activities; the inadequate availability of data on deaths and injuries; environmental and social impacts of these activities; and, the establishment of a regulatory framework that is both permissive and balanced towards safety and the interests of other community members.

The Committee had difficulty acquiring meaningful and reliable figures on crashes involving off road vehicles on unformed roads, tracks and on private land. Witnesses explained to the Committee that such crashes could be both misreported and underreported. As such, the consistency of data has been an issue. Furthermore, the term 'off road motorcycle' is used loosely and is difficult to define precisely.

Anecdotal evidence provided to the Committee suggests that a considerable problem exists.

Dr Gary Fettke, a Launceston-based orthopaedic surgeon, said that in his experience at the Launceston General Hospital, off-road motorcycle crash casualties far outnumber car crash casualties by ten to fifteen times.[534]

The Department of Health and Human Services (DHHS) provided available admissions data in relation to injuries through use of motorcycles or all-terrain vehicles (ATVs) primarily for off-road purposes. This is shown in the table below. Some requested data could not be provided for reasons DHHS explained in a letter accompanying the information supplied.[535] Emergency Department admissions data was not available and no data prior to 2002 was available. The data provided covered both public and private hospitals in Tasmania.

[534] Fettke, transcript of evidence, 25 March 2009, p. 2
[535] Information provided by DHHS, March 2009

Motorcycle and All-Terrain Vehicle Admissions, Tasmania, 2002-03 to 2008-09[536] in accordance with International Statistical Classification of Diseases and Related Health Problems, Tenth Revision (version 3), Australian Modification (ICD-10-AM)

Motorcycle designed primarily for off-road use

		South	North	North West	Interstate/ Unknown	Total
V20	Motorcycle rider injured in collision with pedestrian or animal	<5	<5	0	0	(1-5
V21	Motorcycle rider injured in collision with pedal cycle	0	0	0	0	0
V22	Motorcycle rider injured in collision with two- or three-wheeled motor vehicle	5	27	8	0	40
V23	Motorcycle rider injured in collision with car, pick-up truck or van	14	18	<5	<5	35
V24	Motorcycle rider injured in collision with heavy transport vehicle or bus	0	0	0	0	0
V25	Motorcycle rider injured in collision with railway train or railway vehicle	0	0	0	0	0
V26	Motorcycle rider injured in collision with other nonmotor vehicle	0	0	0	0	0
V27	Motorcycle rider injured in collision with fixed or stationary object	39	24	24	<5	(87-91)
V28	Motorcycle rider injured in noncollision transport accident	148	152	83	9	392
V29	Motorcycle rider injured in other and unspecified transport accidents	0	0	0	0	0

Occupant of special all-terrain or other motor vehicle designed primarily for off-road use, injured in transport accident

		South	North	North West	Interstate/ Unknown	Total
V86.0	Driver of all-terrain or other off-road motor vehicle injured in traffic accident	9	5	8	<5	(23-27)
V86.1	Passenger of all-terrain or other off-road motor vehicle injured in traffic accident	<5	<5	<5	0	(6-10)
V86.2	Person on outside of all-terrain or other off-road motor vehicle injured in traffic accident	<5	0	0	0	(1-5)
V86.3	Unspecified occupant of all-terrain or other off-road motor vehicle injured in traffic accident	<5	<5	<5	0	(1-5)
V86.4	Person injured while boarding or alighting from all-terrain or other off-road motor vehicle injured in traffic accident	0	0	<5	0	(1-5)
V86.5	Driver of all-terrain or other off-road motor vehicle injured in nontraffic accident	48	51	121	14	234
V86.6	Passenger of all-terrain or other off-road motor vehicle injured in nontraffic accident	7	10	14	0	31
V86.7	Person on outside of all-terrain or other off-road motor vehicle injured in nontraffic accident	<5	<5	<5	<5	8
V86.9	Unspecified occupant of all-terrain or other off-road motor vehicle injured in nontraffic accident	7	<5	13	0	(22-26)

<5 indicates that the number is below 5 but greater than 0, and has been suppressed due to confidentiality reasons and guidelines.

Mr Geoff King said that, whilst he is aware anecdotally of vehicle-related incidents and unsafe practices occurring in the Arthur-Pieman Conservation Area, authorities are not keeping records.[537] He said:

> "*There is no formal reporting process from the police to Parks and Wildlife. Parks do not know what has happened on their ground. If someone has an accident on a weekend where there are no Parks and Wildlife staff on duty, there is no formal way that comes back down so that they know what has*

[536] Information provided by Minister for Health, 26 August 2010
[537] King, transcript of evidence, 21 October 2008, p. 40

happened on their territory. The call goes through to the police or the ambulance and does not necessarily come back to Parks."[538]

Mr Scott Gadd (former Secretary, Department of Environment, Parks, Heritage and the Arts[539]) said underreporting is a problem:

"*We do not keep statistics because we only become aware if we are involved in recovery or rescue. A large number, I suspect, are never reported – they are dealt with by the families and friends that are with the people at the time. Then there is the official search and rescues which the police would have statistics on.*"[540]

He added:

"*I think there is a large number of them, and that we do not know. We know of some – some are reported, some are not, some get media, but I suspect there is a whole heap out there that we never know about – the sprained wrists, ankles, torn ligaments, cuts and bruises, abrasions that are just never reported or not dealt with. The point I would make is what we do know is there have been deaths. We have seen young kids killed and we have seen a whole range of serious accidents, and in my mind one death makes it a fairly serious statistic.*"[541]

The Committee sought available statistical information in relation to crashes involving off-road vehicles.

Fatal Off-Road Motorcycle Crashes, Tasmania, 1999-2008	
Year	Notified to Coroner's Office[542]
1999	-
2000	1
2001	1
2002	2
2003	6
2004	2
2005	1
2006	2
2007	0
2008	3
TOTAL	18

[538] King, transcript of evidence, 21 October 2008, p. 40
[539] Following a restructure and amalgamation of two departments, the Department of Primary Industries, Parks, Water, and Environment has since superseded DEPHA.
[540] Gadd and Wilson, transcript of evidence, 14 October 2008, p. 21
[541] Gadd and Wilson, transcript of evidence, 14 October 2008, p. 22
[542] Legislative Council *Hansard*, 9 April 2009, pp. 23-24

Serious Injury Off-Road Motorcycle Crashes[543]	
Year	Notified to DIER
1999	1
2000	0
2001	0
2002	1
2003	1
2004	1
2005	5
2006	4
2007	11
2008	7
TOTAL	31

Dr Gary Fettke said that the health system should have a reporting code category for off-road motorcycle-related injuries.[544] However, Mr Richard Wadsworth of the Victorian Department of Sustainability and Environment (DSE) said that the location of crashes could be misreported to authorities.[545]

Mr Roger Pitt (DSE) explained how this could occur:

> "*People are registered and licensed and are therefore covered by Transport Accident Commission insurance, but if they actually have an accident off the road network, perhaps even on private property, they attempt to report it as being a road traffic accident because they then can get income protection cover. So some accidents will be reported as being a road traffic accident when they may not have been. There is also misreporting in the opposite direction when people who are unregistered or unlicensed have a crash on the road network, they will… report it as having happened on private property to avoid prosecution*."[546]

Mr Pitt also said that available data in Victoria suggests that unlike on-road motorcycling, off-road motorcycling or dirt bike riding "*results in a very small number of fatalities but has a relatively high number of low-level injuries*" because riders are "*travelling at a lower speed and if they fall off at 30km/h or 40km/h they can pick themselves up, dust themselves off, and on they go.*"[547]

The Committee asked Mr James Harrison (Director, Research Centre for Injury Studies) to what extent off-road crashes are misreported, such as due to the crash involving an unregistered vehicle on a public road. He explained:

> "*There is a lot of literature… that has shown that if you look at police statistics by road user type vehicles – a motor car driver, a pedestrian, a cyclist, that*

[543] DIER provided data on fatal and serious injuries combined for the categories of "all terrain vehicle" and "all terrain rider". Information provided by DIER, 17 March 2009
[544] Fettke, transcript of evidence, 25 March 2009, p. 4
[545] Wadsworth and Pitt, transcript of discussion, 28 January 2009, p. 2
[546] Wadsworth and Pitt, transcript of discussion, 28 January 2009, p. 2
[547] Wadsworth and Pitt, transcript of discussion, 28 January 2009, p. 27

kind of thing – the difference in the apparent level of rate of cases between what you see in police statistics versus what you see in hospital statistics is kind of consistent with the sort of story you are talking about. The two rates look very similar for car drivers and truck drivers and so on, but when you look at motorcyclists, the hospital-derived stats are almost uniformly much higher than the police-derived stats, and that has been explained in most of these studies as an incentive not to report and an ability not to report under a number of circumstances such as the ones you have raised. But certainly different data sources give you a different picture."[548]

The Committee heard that in some circumstances off-road vehicle users might not be covered by third-party personal injury insurance in the event of a crash, particularly for children riding unregistered motorcycles. According to the MAIB:

"*Claims for personal injury resulting from off-road crashes are subject to the same legislative provisions as those that apply to motorists generally:*

- *A driver must have a driver licence of the appropriate class; and*
- *A premium must have been paid in respect of the motor vehicle.*"[549]

Mr Peter Roche (CEO, MAIB) clarified that in the event of a one-vehicle crash involving an unlicensed juvenile rider using a registered motorcycle on private land, the person would be covered. He said:

"*The legislation talks about having a driver licence of the required class. So if they are on private property, you do not require a driver licence, so you escape that particular provision. But, of course, if you are on crown land or whatever and you have a car licence and you are driving a two-wheel vehicle, you are not covered because you are required to have a motorcycle licence.*"[550]

Mr Roche also said:

"*If a person was injured because of the negligence of another off-road driver – and that, unfortunately, does happen and we have had some very nasty accidents in recent years where these people have run into one another – whether they had a licence or not they would not be precluded from claiming common law damages if another off-road person was negligent.*"[551]

However, the MAIB also commented in its submission:

"*All too frequently, claims are denied because the injured trail bike or quad bike rider fails one or both of the above tests. In the three years ending 30 June 2008, some 292 claims were lodged in respect of off-road vehicles. Around 80% of these claims were rejected, mostly because of the reasons outlined.*"[552]

[548] Harrison, transcript of discussion, 30 January 2009, p. 7
[549] MAIB, submission, p. 5
[550] Roche and Humphries, transcript of evidence, 22 October 2008, p. 100
[551] Roche and Humphries, transcript of evidence, 22 October 2008, p. 99
[552] MAIB, submission, p. 5

In addition to issues relating to safety, the Committee was also made aware of impacts off-road vehicle use has in terms of excessive noise and damage to the environment. However, it was pointed out that for some people, off-road vehicle use is an enjoyable activity with social benefits. Mr Geoff King said that within the Arthur-Pieman Conservation Area, unlimited numbers of recreational users are being permitted to enter without an adequate presence of police and Parks and Wildlife Services officers to manage the area.[553] He said:

> "*If you want to manage a crowd, you either keep the numbers in the crowd low and staff it with what you have or you increase the staff to manage whatever the crowd is.*"[554]

Mr Scott Gadd said that large numbers of riders leads to environmental destruction:

> "*What we are seeing particularly on the west coast of Tasmania is that there is anecdotal evidence that on some weekends up to 200-plus interstate motorbikes predominantly but often ATVs and other four-wheel drives as well are traversing through the area in one weekend. They are coming off the ferries in huge numbers, often in organised groups, blitzing the west coast and getting back on the ferry at the end of the weekend and going home. Whilst this is a great thing for tourism and it is a good economic driver for the west coast, I am sure, the problem when they are coming in such large numbers in an unchecked manner is the sheer destruction that 200 bikes can create over a weekend, particularly if it is a wet weekend.*"[555]

Mr Richard Wadsworth (DSE) explained that views in the community towards trail bike riding are "*highly polarised*" [556] He said that some people want to "*ban that type of pursuit"* and for *"government to come in heavy-handed*". [557] He continued:

> "*That is just not feasible or sustainable. … In some of the interviews we have done, and so on, one of the things that quite often comes up is how much they get out of it. Some individuals report that if I didn't do this then I might have got into some less savoury things as a teenager; this helped me hold it together and it was a great release. People talk about leaving their cares at home and it really helps them reset their compass. There are a lot of social benefits, I would say, from trail bike riding and a lot of personal benefit that they get from it. There is a broader lens to look through this as well. They don't do it to annoy people or to aggravate people or reduce other people's quality of life.*"[558]

In his submission, Mr Greg Styles advised the Committee not to recommend measures that would "*take away any more of our fun*" and "*penalise reasonable ordinary people just trying to enjoy their leisurely time*." [559]

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[553] King, transcript of evidence, 21 October 2008, p. 39
[554] King, transcript of evidence, 21 October 2008, p. 41
[555] Gadd and Wilson, transcript of evidence, 14 October 2008, p. 19
[556] Wadsworth and Pitt, transcript of discussion, 28 January 2009, p. 8
[557] Wadsworth and Pitt, transcript of discussion, 28 January 2009, p. 8
[558] Wadsworth and Pitt, transcript of discussion, 28 January 2009, p. 8
[559] Styles, submission

The question of whether a licensing and registration regime should be available for off-road motorcycles or vehicles was subject to mixed responses from witnesses. Some were in favour, at least in principle, of introducing a system; others cautioned that this would be a further example of personal liberties being eroded. According to DIER, there is not a stand-alone regime for licensing and registration of off-road motorcycles:

> "*In Tasmania, the legislative framework for the registration, licensing, and usage of motor vehicles is centred around the use of motor vehicles on public streets. [As] a large number of off-road vehicles were not designed or intended for use in such areas they do not have to comply with these requirements. Currently there is no legislative framework for the use of off-road vehicles on private property*."[560]

Ms Bronwyn Cook observed that there is "*a bizarre situation in Tasmania where people are free to buy trail bikes but are not allowed to ride them virtually anywhere.*"[561]

Stay Upright Motorcycle Techniques submitted that riders could be licensed by undertaking training and obtaining a statement of attainment, presentation of which would be necessary to purchase an off-road motorcycle or ATV. [562]

Mr Greg Styles, who submitted that licences are not required for other equally dangerous pursuits, said:

> "*I would suggest that mountain bikes, bicycle road racing, snowboarding, skateboarding, kayaking, scuba diving, archery, and any other slightly adventurous vehicle or sport would have similar inherent dangers but I would never recommend licensing or registration for any of these things.*"[563]

Dr Gary Fettke stated that as well as introducing a licensing system, there could be a requirement that safety equipment be sold together with every off-road motorcycle sold together with compulsory registration.[564] He also drew a comparison with arrangements for recreational boating and watercraft.[565]

Mr Roger Pitt (DSE), however, pointed out that the cost of safety equipment might be prohibitive for some:

> "*The point was made to us… by a representative of a large motorcycle retailing chain that the single most significant impediment to having riders appropriately equipped was the cost of the equipment and good quality, mid-range equipment including boots, gloves, helmets, goggles, body armour and protective clothing is going to cost you a minimum of $1,500-$2,500 and that is not for the high-bling-factor equipment, that is good quality, useable equipment.*"[566]

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[560] Information provided by DIER, 17 March 2009
[561] Cook, submission
[562] Stay Upright Motorcycle Techniques, submission, p. 6
[563] Styles, submission
[564] Fettke, transcript of evidence, 25 March 2009, p. 13, p. 16, and p. 17
[565] Fettke, transcript of evidence, 25 March 2009, p. 17
[566] Wadsworth and Pitt, transcript of discussion, 28 January 2009, p. 6

Mr Scott Gadd said that a system of licensing for children under adult supervision, similar to recreational boat licensing, should be considered. He said:

> "*If we can do it for kids on speedboats, if you can get a provisional motorboat licence at 12 years of age provided you are under supervision, provided you have done X, Y and Z then maybe we can have a provisional licensing system that says that provided you have done so many hours or so many courses or got to a certain level in a mini-bike club and you are under supervision, then you are licensed to ride on reserve land.*"[567]

Young people aged between 12 and 17 years can acquire a provisional recreational boating licence, obtained through the same combination of logbook hours, tuition and testing applied to full licence holders. According to Marine and Safety Tasmania's website:

> "*The following restrictions apply to provisional [boat] licence holders:*
>
> - *Must be accompanied by an adult;*
> - *Must not take charge of a motor boat at night;*
> - *Must not at any time exceed a speed of 20 knots;*
> - *Must not tow a skier;*
> - *Must not tow an aquaplaner at a speed exceeding 10 knots*"[568]

Whereas DEPHA supported the introduction of licensing for minors on off-road motorcycles, the MAIB and DIER were opposed to the idea. Mr Peter Roche (MAIB) said an off-road motorcycle licensing regime for minors is probably unworkable:

> "*Currently I think the premium is $180 for an off-road vehicle. MAIB could charge double the amount recommended to government by GPOC but we have not implemented that higher charge because it is very difficult to get people to pay $180 and I shudder to think what would happen if we introduced a $330 premium. … Do we make special rules for a five-year-old running around the bush in a sort of a fully quasi-licensed arrangement? Would we consider doing the same for someone wanting to drive a car up Brisbane Street? I am not sure there would be any support for temporary or partial licences for children to be driving cars on streets. I understand where people come from wanting kids to have the opportunity to drive these things but I think from an MAIB point of view we would be concerned about something being offered to off-road enthusiasts but not to other people.*"[569]

Similarly, DIER indicated its opposition to a registration and licensing regime for off-road motorcycles at this time:

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[567] Gadd and Wilson, transcript of evidence, 14 October 2008, p. 20

[568] Marine and Safety Tasmania, 'Licence Procedures', at <http://www.mast.tas.gov.au/domino/mast/mastweb.nsf/v-lu-all/Recreational+Boating~Licence+Procedures?OpenDocument> [accessed September 2010]

[569] Roche and Humphries, transcript of evidence, 22 October 2008, p. 101

> "*Registration and licensing is used as a compliance tool, supported by enforcement, to achieve the aims of driver behaviour and vehicle management. … One important reason for not introducing registration and licensing requirements for off-road vehicles on private land relates to enforcement problems. … If such regulation were extended to private land, it is considered that there would be limited opportunity to enforce the requirements, leading to a lack of incentive for off-road motorcycle riders to comply. This would most likely be seen as another layer of unnecessary red tape that will not achieve a change in rider behaviour or vehicle design. Further, just because a bike is required to be registered, it does not mean that people will automatically ride more safely*."[570]

Police and other witnesses told the Committee that for a number of reasons, countering illegal riding activity is difficult. In particular, these reasons related to identification, apprehension, and legislative shortcomings.

The Department of Police and Emergency Management submitted that enforcing offences relating to off-road motorcycles is difficult:

> "*Enforcement of offences and investigation of complaints relating to users of off-road motorcycles in off-road environments remains problematic. … Provisions of the Traffic Road Rules, which are used for normal traffic/road safety enforcement purposes, do not apply unless the vehicle in question is being used on a road or road-related area. … Registration and driver licensing provisions of the Vehicle and Traffic Act only apply if the 'off-road' vehicle is being used/driven on a public street. Environment management (noise) legislation may apply to vehicles including motorcycles used within 500 metres of a private residence, and is the enforcement measure most commonly used in relation to the majority of public complaints relating to off-road motorcycle usage.*"[571]

The submission also stated:

> "*Successful enforcement of any legislation applicable to off-road vehicles is, however, limited owing to difficulties in apprehending or identifying offenders who have either left the area in question or employ evasion techniques in rough terrain. In addition, the age of many offenders, particularly those using motorcycles on private land, is such that enforcement action is in many cases not a feasible or possible option. Action which may be taken against parents of young riders creating a nuisance by using off-road motorcycles on private land is also limited.*"[572]

Inspector John Cooper (Tasmania Police) said that police seize bikes on a weekly basis.[573] He added:

> "*We seize them generally under the environment protection laws, that is riding within 500 metres of dwellings. Many of those bikes are returned to owners, but it is dependent on the local councils, who we liaise with, in relation to their laws associated with the disposal of those motorbikes. Some*

[570] DIER, submission, p. 3
[571] Department of Police and Emergency Management, submission, p. 4
[572] Department of Police and Emergency Management, submission, pp. 4-5
[573] Hine *et al*, transcript of evidence, 6 May 2009, p. 31

are returned, some are sold. It depends on which council we are working in partnership with and the by-laws associated with that particular council."[574]

Ms Carol Thompson told the Committee of difficulties she has experienced:

"*We made numerous phone calls to police at Dover, Geeveston and Huonville, only to be told we needed photos of them without their helmets. They are too slick for that; they are always going to have their helmets on when they are riding on the road.*"[575]

In her submission, Ms Thompson stated:

"*I also think the present legislation that off-road bikes are allowed to ride 500 metres from a residence is too close especially when you live in a flat area (as we do) and off-road bikes ride on surrounding hills*."[576]

Witnesses suggested that all types of motorcycles should be required to have a numberplate displayed on the front to assist with identification.[577]

As well as safety and other issues caused by the manner and locations in which off-road motorcycles are ridden, the Committee heard concerns expressed about the integrity of the bikes themselves. A number of witnesses observed that sub-standard bikes are being imported from China and then sold into Australian markets.[578] Dr Gary Fettke said that point of entry and point of sale are areas where intervention is needed.[579]

Mr Richard Wadsworth (DSE) said:

"*The Australian Design Rule standards fall into line with international conventions. The Australian market is not a huge market necessarily so we can't ask for different standards for bikes that are radically different from what they want overseas. In terms of this market, which is outside Australian Design Rule regulations and the National Transport Commission scope, they are selling a bike that they don't advertise as being available for use on public road networks. They are saying, 'This bike has a legitimate outlet, and that is on private land. If you operate on private land, you don't need to meet all those Australian design rule standards and so on'. It does have a legitimate use but what is happening is that people are taking up those bikes and using them in areas that legally they can't be used in.*"[580]

A number of witnesses suggested that education and information for riders could assist with ameliorating safety issues arising during off-road riding. Stay Upright Motorcycle Techniques submitted that it is "*possible to reduce off-road*

[574] Hine *et al*, transcript of evidence, 6 May 2009, p. 31
[575] Thompson, transcript of evidence, 27 March 2009, p. 1
[576] Thompson, submission
[577] Fettke, transcript of evidence, 25 March 2009, p. 20; Reid, transcript of evidence, 26 March 2009, p. 75
[578] Casimaty, transcript of evidence, 26 March 2009, p. 107; Fettke, transcript of evidence, 25 March 2009, p. 6; Franks and Kitto, transcript of evidence, 25 March 2009, p. 72
[579] Fettke, transcript of evidence, 25 March 2009, p. 12
[580] Wadsworth and Pitt, transcript of discussion, 28 January 2009, p. 14

crashes/fatalities through driver education."[581] Mr Greg Styles submitted that circulating "*educational pamphlets in shops*" would be helpful.[582]

DIER's submission stated:

> "*DIER holds the belief that education on using off-road vehicles can play a vital role in reducing the number of off-road vehicle crashes. Particularly, education that encourages users of such vehicles to wear appropriate safety gear, such as improved helmets, jackets, pants, and gloves.*"[583]

The Committee heard that establishing venues managed by accredited operators would allow children and others to ride in a controlled environment at the same time as avoiding the need to be registered or licensed *per se*. Mr Peter Kitto and Ms Anne Franks (Motorcycling Tasmania) said that Motorcycling Australia have a regime in place that allows children to ride motorcycles in an environment with trained supervisors, registration, insurance, and safety standards.[584] Ms Franks said:

> "*Seven years and onwards can race, and they have to have their parents with them. Under-16 all-junior riders have to do a compulsory five hours' training before they can have any type of licence. They have to accredit that licence with that five hours every year up to the age of 16. That was brought in about five years ago by Motorcycling Australia. If you are a senior rider it is a little bit easier. You can come on the day, you can get a one-day practice or race licence, whatever is happening. Your bike is scrutineered, your gear is scrutineered, everything is checked before you go out on that track*."[585]

Ms Franks also remarked that her daughter had found Motorcycling Tasmania to have higher standards than for on-road motorcycle licence tests.[586]

Mr Greg Casimaty said that unless riders are provided with a place to ride, "*they find somewhere that is illegal and dangerous*."[587] He described how he has arranged a motorcycle racing facility for junior riders:

> "*I have a facility at Cambridge called Cambridge Moto Training, which is the first of its type in the nation. … We have been having competitive motorcycle racing on my property next to Cambridge Airport for in excess of 15 years. We have succeeded time and time again to have race meetings with no injuries whatsoever. The methodology of how I go about it is that the Cambridge Moto Training facility is run under either Motorcycling Australia and/or CAMS [Confederation of Australian Motorsports]. There is no private insurance that I have whatsoever apart from liability insurance if people trip over. All of the motorcycling and driving activity is organised and insured and licensed and accredited by the two bodies in Australia that organise racing*

[581] Stay Upright Motorcycle Techniques, submission, p. 3
[582] Styles, submission
[583] DIER, submission, p. 4
[584] Kitto and Franks, transcript of evidence, 25 March 2009, pp. 77-80
[585] Kitto and Franks, transcript of evidence, 25 March 2009, p. 77
[586] Kitto and Franks, transcript of evidence, 25 March 2009, p. 81
[587] Casimaty, transcript of evidence, 26 March 2009, p. 102

for cars and bikes. I cannot see why it has been so long that these mechanisms are not used on a regular basis."[588]

He continued:

"*Motorcycling Australia have a system by which children from seven years of age and upwards have a coaching education regime that is compulsory. You must have coaching to enter the racing arena. When you get to the racing arena they are all going in the same direction, they are all taken care of and baby-sat the whole way through by accredited officials and they are trained. … With 1 hectare of land or more I can build a facility that is capable of having 120 riders every day going round an approved, accredited track, custom made and they are licensed and insured*."[589]

He also observed that the cost of an annual licence or recreational licence is "*chickenfeed in regard to what it costs to chase these kids through the bush*".[590]

Term of Reference 6 refers to "the use of motorcycles off-road" though does not define exactly what distinguishes an off-road motorcycle from a motorcycle primarily designed for use on public roads. The Committee has applied the term generically and, in giving evidence, witnesses have similarly used the term loosely without attempting to draw a definition. The Committee wishes to state, in case any doubt arises, that the findings and recommendations on this subject are intended to cover quad bikes in addition to two-wheeled bikes.

[588] Casimaty, transcript of evidence, 26 March 2009, p. 102
[589] Casimaty, transcript of evidence, 26 March 2009, p. 103
[590] Casimaty, transcript of evidence, 26 March 2009, p. 103

Findings

The Committee found that –

64. Data pertaining to off-road motorcycle crashes is unreliable due to inaccurate reporting and under-reporting of these incidents to the authorities.

65. Nevertheless, many motorcyclists are injured in off-road motorcycle crashes.

66. The nature and number of off-road motorcycle injuries imposes a significant burden upon hospital resources and professional personnel.

67. Off-road motorcycle activity is under-regulated in Tasmania.

Recommendations

The Committee recommends that –

48. Licensing regulations for off-road motorcycle use on public land be introduced along similar lines to those applicable to recreational boating in Tasmania.

49. The State Government request COAG to take such action as may be necessary to regulate the importation into Australia of motorcycles primarily intended for off-road use by ensuring that they comply with minimum acceptable design and safety standards.

50. There be a public education campaign to inform riders of the proper and safe usage of off-road motorcycles.

17 Pedestrians

Pedestrian safety is linked to speed limit management in urban areas and keeping pedestrians physically separate from vehicles through improved road design. Figures show that over the last decade in Tasmania, pedestrian serious injuries have been halved, whilst pedestrian fatalities have been relatively few in number each year.

Pedestrian Fatalities and Serious Injuries, Tasmania, 2000-2009[591]		
	Fatalities	Serious Injuries
2000	9	47
2001	10	43
2002	6	48
2003	3	36
2004	4	40
2005	5	39
2006	3	28
2007	4	23
2008	1	25
2009	3	28
TOTAL	48	357

Dr Bruce Corban (Senior Research Fellow, Safe Systems Strategy and Infrastructure, MUARC) said Sweden has speed limits of 30km/h in areas with high pedestrian traffic. He said that "*getting speeds down*" to this level and having traffic calming measures has halved pedestrian deaths in Gothenburg. He said:

> "*They have put in… something approaching 700-800 individual treatments of that type over recent years and they are absolutely convinced that that is the reason for such dramatic improvements in the rates of pedestrian and cyclist deaths*."[592]

Dr Peter Cairney (ARRB Group) said pedestrians are generally killed when hit by cars at a speed above 40km/h. [593] One submission drew attention to the presence of four-wheel drive vehicles in urban areas and the bulk and size of these types of vehicles compared to small cars and pedestrians.[594] Dr Cairney said that ideally, roads should be designed to ensure pedestrians and vehicles are separated from each other.[595]

An evaluation of the road trauma trends subsequent to the introduction of the 50km/h urban speed limit in Tasmania, provided to the Committee, did not specifically test for pedestrian-related incidents. However, as shown by the table

[591] Information provided by DIER, 17 March 2009
[592] Mitsopoulos-Rubens *et al*, transcript of discussion, 28 January 2009, p. 14
[593] Cairney *et al*, transcript of discussion, 28 January 2009, p. 19
[594] Holderness-Roddam, submission, pp. 3-4
[595] Cairney *et al*, transcript of discussion, 28 January 2009, p. 19

above, the overall number of pedestrians seriously injured on Tasmanian roads over the ten-year period 2000 to 2009 has reduced.

In late-2009 the NSW Parliamentary Staysafe (road safety) Committee tabled a report into pedestrian safety. That report has observed:

> "*A consistently highlighted theme during the Inquiry concerns the need for updated and improved engineering solutions to assist vulnerable road user groups. There is a persistent view that road designers do not take adequate account of pedestrians, who are not treated as equal partners when accessing the road network. The lack of recognition of pedestrian needs is demonstrated by issues such as: the short crossing times allowed for in metropolitan settings; gaps in pedestrian infrastructure such as lack of adequate ramps, footpaths and road refuges; inadequate street lighting; and inadequate crossing technology options*.
>
> […]
>
> *A major source of frustration for all pedestrians, particularly in metropolitan settings, is the phasing of walk time at signalised intersections. The relatively short time allowed for pedestrians to cross the road limits pedestrian movement and acts to increase risk taking when walking. Current traffic signal technology can be made more pedestrian responsive by extending the pedestrian phase of signals at intersections with high pedestrian traffic and during peak pedestrian commuter times, implementing the introduction of pedestrian user-friendly intelligent crossing technology at all appropriate locations in NSW and examining the feasibility of countdown timers*."[596]

The report noted that countdown timers, which display for pedestrians the length of time before the next green period to cross the road, could "*alleviate impatience and risk-taking by pedestrians*" by "*reducing the tendency to cross against the walk signal*." The Staysafe Committee recommended that the RTA trial countdown timers "*as a matter of urgency*".[597] This Committee is also supportive, in-principle, of introducing countdown timers at pedestrian crossing points.

[596] Staysafe Committee, 'Report on Pedestrian Safety', December 2009, report 3/54, pp. xii-xiii
[597] Staysafe Committee, 'Report on Pedestrian Safety', December 2009, report 3/54, p. 62

Findings

The Committee found that –

68. Pedestrians are a vulnerable group of road users.

69. Vehicle design and speed limits in areas of pedestrian activity reduces the severity and number of crashes involving pedestrians.

Recommendations

The Committee recommends that –

51. There be ongoing development of vehicle design to reduce pedestrian serious casualties.

52. There be a public awareness campaign to raise awareness of pedestrian safety issues and to encourage pedestrians to wear highly visible clothing.