Contract Report

Exploring how the Safe System concept might change the way people are introduced to driving

by *Victoria Pyta & Dr Peter Cairney*

for NRMA - ACT Road Safety Trust

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arrb research

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	Reviewed
Project Leader	
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Summary

The central tenet of the Safe System philosophy is ensuring 'that human bodies are not exposed to greater physical forces than they can withstand without serious damage'. This is achieved by 'minimising the risk posed by the different interacting elements of the road transport system' (Austroads 2006, p.13). The interacting elements of the Safe System include the road user, the vehicle and the road environment both before, during and after a crash has occurred.

The primary objective of this project is to test the viability of introducing Safe System concepts to drivers at an early stage in the learning process. No licensing authority has yet attempted to communicate the principles of Safe System directly to drivers. By introducing the concept in an easy to understand manner in the *ACT Road Rules Handbook*, driver understanding of their role in road safety should be improved. The benefits, should the recommendations of this report be implemented, might include priming road users for attitude and behaviour change.

This project involved:

1. *Review of the Handbook*: an initial review of the *ACT Road Rules Handbook* to identify areas where the Safe System message could be overlayed.
2. *Development of messages*: production of proposed new content based on the Safe System philosophy and grounded in established theory of persuasion.
3. *Review by expert panel*: an expert panel to review and provide suggestions for improvement of the proposed new content. Revisions were made to the messages to incorporate the suggestions of this review before presentation to the focus groups.
4. *Critique by focus groups*: two focus groups to provide young driver opinions and ideas about the style and content of the messages. Final revisions were made to incorporate this critique.

The most direct and obvious relationships between driver behaviour and crash outcome when considered from the Safe System perspective are between (1) speed and impact forces and (2) restraint wearing and survivability of crashes. Consumption of drugs and alcohol, fatigue and distraction also influence traveling speed, likelihood that a restraint will be worn and likelihood that a crash will occur. Vehicle choice and maintenance is another facet of the Safe System over which road users exert control.

The review of the Handbook revealed that factual messages about the relationship between speed and braking distance, seatbelts and drugs and alcohol are already well documented in the Handbook. However, fatigue is not mentioned and distraction is only mentioned insofar as it relates to mobile telephone use. Vehicle choice and maintenance are also not covered.

Messages were initially developed to target: the Safe System concept; seatbelts; drink driving; fatigue; and speeding. After review by the expert panel, the initial message developed for seatbelts was not presented to focus group participants due to agreement that seatbelt wearing rates are high in Australia and greater benefit is to be had by focussing any additional Handbook content on problems that are more widespread. Note that this is not a recommendation to remove the educational material on seatbelts that is already contained in the Handbook. At the recommendation of the expert panel, messages were also revised to better address the common motivations for risky driving behaviours, with the aim of making the messages more personally relevant.

Focus group participants were therefore presented with messages about: the Safe System concept (presented diagrammatically at the suggestion of the focus group); Safe Speeds; Safe Vehicles; drink and drug driving and fatigue. The issue

of distraction was also discussed in the focus groups, although no message was presented to participants. The results from the focus group discussions have been used to further revise the messages in terms of content, although further work will be needed to maximise on visual appeal and peer approval.

The concept of Safe System was generally well received by focus group participants. Participants liked the simplicity of the concept and the fact that their role and responsibilities became obvious very quickly. The messages for Safe Speeds; Safe Vehicles; drink and drug driving and fatigue were also generally accepted by participants although there were some differences of opinion which are discussed in the report.

There was a perception among participants that drink driving is socially unacceptable among their age group. Based on this feedback, it was considered that adding extra messages about drink driving would not be the most efficient use of space in the Handbook. The proposed message could be replaced with a message about distraction, which was perceived by young drivers to be more prevalent and socially acceptable. Nonetheless, it may be appropriate to reword the current material slightly to highlight the importance of sober driving in the Safe System.

In general, participants appreciated simplicity and brevity. Participants welcomed messages that provided a realistic depiction of the problem and took a problem solving approach rather than simply lecturing about what not to do. The ‘problem solving’ approach in the focus group discussion was particularly successful in engaging participants. They were highly critical of messages that appeared to insult their intelligence whilst commending messages that were supported with a few brief, demonstrable facts that told them something new. Participants were also critical of messages that, on the surface, appeared to be outdated.

It is concluded that Safe System is a useful concept for quickly introducing safety considerations to young drivers. Designing Safe System messages for learner drivers is viable. They are well-received by the target audience and are worth developing further.

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Contents

1 Introduction

1.1 About Safe System

Safe System is the guiding principle of the *National Road Safety Action Plan: 2009 and 2010* (Australian Transport Council 2008). The central tenet of the Safe System philosophy is described in the *Guide to Road Safety* as ensuring 'that human bodies are not exposed to greater physical forces than they can withstand without serious damage'. This is achieved by 'minimising the risk posed by the different interacting elements of the road transport system' (Austroads 2006, p.13). The physical forces are the combined influence of mass and speed. The interacting elements include the road user, the vehicle and the road environment both before, during and after a crash has occurred. More information about these elements can be found in Section 1.3.

1.2 About this project

The primary objective of this project is to test the viability of introducing Safe System concepts to drivers at an early stage in the learning process. No licensing authority has yet attempted to communicate the principles of Safe System directly to drivers. The ACT Government is planning to rejuvenate the *Road Ready* program and a revamped road rules handbook would complement this development. By introducing the concept in an easy to understand manner in the *ACT Road Rules Handbook*, driver understanding of their role in road safety should be improved. It is hoped that an attitude of partnership and collaboration with authorities can be achieved, and that drivers can become more inclined to adopt safer driving practices. The benefits, should the recommendations of this report be implemented, might include priming road users for attitude and behaviour change.

The project involved the following steps (which are outlined in detail in the following sections of this report):

- an initial review of the *ACT Road Rules Handbook* to identify areas where the Safe System message could be overlayed
- production of proposed new content based on the Safe System philosophy and grounded in established theory of persuasion (described in Section 1.4)
- an expert panel to review and provide suggestions for improvement of the proposed new content
- two focus groups to provide young driver opinions and ideas about the style and content of the messages.

The proposed messages documented in this report have had the benefit of both the expert panel review and testing in focus groups.

Note that this project is not intended to produce a new *ACT Road Rules Handbook*, but to test the viability of introducing the Safe System to young drivers in the Handbook.

1.3 Elements of the Safe System

The road environment

Australian road authorities have invested in research to make the road environment more forgiving so that crashes are less likely to occur and less likely to result in serious injury or death[1]. Many jurisdictions have taken advantage of this research in their road design and in their speed limit setting principles.

The vehicle

Vehicle manufacturers are now investing much more in research and development of occupant protection and vulnerable road user protection. Australian Design Rules (ADRs) specify minimum standards for safety, emissions and theft-prevention (Department of Infrastructure, Transport, Regional Development and Local Government 2009). In recent years, there has been increasing competition among vehicle manufacturers to exceed these minimum standards. Websites such as www.howsafeisyourcar.com.au, hosted by ANCAP (Australasian New Car Assessment Program), promote competition among manufacturers to develop safer vehicles.

The road user

Governments set rules for road users to ensure they interact safely with one another. They invest in education and enforcement programs to encourage compliance with road rules. For their part, road users are expected to:

- be aware of, and comply with, the road rules set down by government to protect them
- manage issues that affect their driving that cannot be effectively designed or legislated for, for example fatigue management
- maintain their vehicle to ensure it is safe to drive, for example keeping brakes in good working order.

The expectation is that if the road user does their part then the Safe System principles should ensure that when a crash occurs they neither sustain serious injury themselves, nor cause serious injury to other road users.

In an ideal road system where the principles of the Safe System philosophy are fully realised, the potential for serious harm to road users would be designed out of the system. However, the current reality is that most governments do not have sufficient funds to provide infrastructure that complies with Safe System requirements, and vehicle manufacturers are unlikely to be able to provide a full range of vehicles which comply with the Safe System principles at affordable prices.

Road users may also be unlikely to accept this level of government interference in the activity of driving. For many road users, driving is not just a means of getting from one place to another. Drivers enjoy a feeling of control over their vehicles and a feeling of freedom on the open road (Brittle & Cosgrove 2006). Any restriction that threatens this sense of control and freedom is likely to result in reduced compliance.

Therefore, the Safe System relies, to a greater or lesser extent, on an implicit social contract between road users and the road authorities. It is generally accepted by government and practitioners that it helps if road users know what they can do to improve their safety, understand how important their involvement is, and feel like they are an active part of the road safety solution.

[1] Inspection of the Austroads *Guide to Road Safety* and many Austroads research reports will demonstrate this.

Rites, rights and learning to drive, or why it is important to introduce the Safe System to novice drivers as early as possible

In the minds of many Australians, learning to drive is a rite of passage, a formal step in the transition to adulthood (Smith 2008). A driver licence permits the holder to travel independently of one's parents and free from the constraints of the public transport system. In 2001, 94% of the population of the ACT aged 16 years and older held a driver licence and/or motorcycle licence (ABS 2002a, 2002b) [2].

From these high licensing rates and the cultural perceptions of learning to drive as a rite of passage, it is easy to see how, from an early age, the population can view holding a driver licence as a right rather than a responsibility. It is therefore important to introduce a concept of the road user's responsibilities in the Safe System as early as possible in the licensing process in order to gain acceptance of these responsibilities as an integral part of the rite of passage.

1.4 Conceptual framework for incorporating Safe System in the *ACT Road Rules Handbook*

The conceptual framework that informed the development of messages about the Safe System in this project was the Elaboration Likelihood Model (ELM) of persuasion. Knowledge, whilst necessary, is not sufficient to effect changes in attitude and behaviour. Therefore, more value may be elicited by embedding information about the Safe System in the handbook if it is done in a manner that will help overcome the pressures on drivers to perform illegal and/or unsafe behaviours while in charge of a motor vehicle.

ELM is a well-established and evidence driven theory of persuasion and it is posited that messages developed based on such a theory are more likely to result in positive outcomes. According to the ELM of persuasion, there are two 'routes' to attitude change – central and peripheral.

Central route

The central route involves reaching decisions via conscious processing of all information presented in an argument. To persuade your audience using this route, the argument must be logical and compelling. The audience must also have the ability and be motivated to engage in conscious processing of the message. Using the example of learning to drive, some learners will be highly motivated to learn the road rules presented in the *ACT Road Rules Handbook* because they believe they need to master the content of the Handbook to pass their learner licence test and it is very important to them that they get their licence. Some learners may simply feel it is intrinsically important to know all of the road rules. ELM theory posits that these learners will make a significant effort to read and understand the information contained in the Handbook, and if they judge the content to be logical then they will act in accordance with the information they have processed. Some readers who may be motivated to learn the rules and process the information may not have the cognitive capacity or the concentration span to read and process all of the information. Therefore, these learners may tend towards more peripheral route processes.

Peripheral route

The peripheral route involves surface level reactions to the appearance of the message. For example, a learner who is not motivated and/or able to process all of the information in the Handbook may be more inclined to look at the pictures and/or rely on what they already know from their experience of being a passenger to attempt their learner licence test. Attitude change following the peripheral route is more likely to occur if the message communicator attracts attention to the message and is likable; if

[2] This figure includes learner licence holders and is inferred from information contained in two separate publications, the first documenting the number of licence holders in the ACT and the second documenting the population by age, both at 30 June 2001. To the authors' knowledge, more recent and publicly available data is not available.

the message receiver thinks their peers approve of the message; and if, on the surface, the message is credible. Persuasion under the peripheral route is usually short term unless it is regularly reinforced.

The central route needs to be elicited from readers of the handbook, because this results in long-term attitude change. For central route processing to be achieved, readers have to be compelled to really think about the message they have been presented with in terms of consistency with their existing values and behaviours. They are more likely to feel compelled to do this if the message is personally relevant.

For those for whom reading a road rule handbook is simply a path to passing a test, the peripheral route can be used to attract the attention of the reader and draw them into central route thought processes.

The Safe System message would benefit from being delivered in the following way:

1. **Likeability**: The message should be visually pleasant to look at and attract the reader's attention.
2. **Peer approval**: The message should appear to be delivered by somebody who could be the peer of the target audience. A young man and a young woman would be ideal to give both genders someone with whom they can relate, or a role model for young people such as a sporting or music idol. Unfortunately, this would necessitate regular updates.
3. **Credibility**: The message should be supported by easy to understand, demonstrable facts from an authoritative source.
4. **Personal relevance**: In order to motivate individuals to think about the message, it should highlight how it is relevant to the individual.
5. **Strategies to resist peer pressure**: The peer pressure that young drivers will experience once they begin to drive will challenge their commitment to safe driving. They need to be given ideas and encouraged to formulate their own realistic strategies to resist peer pressure and retain 'peer approval' whilst still driving safely.

In the development of the messages, the core features such as credibility and personal relevance have been concentrated on, as these are the features most important to central route processing. Visual appeal and peer approval aspects are more relevant at the stage of preparing the materials to be used with young drivers, and will need to be developed further at that point to achieve maximum impact.

2 Method

2.1 Review of the *ACT Road Rules Handbook*

Reviewing the *ACT Road Rules Handbook* involved reading the Handbook to determine what information relevant to the Safe System it already contained and how the information was communicated. A list of issues related to the Safe System were developed and a matrix was filled out to indicate whether the issue was addressed and whether its relationship to the Safe System was communicated to the reader. This analysis informed the topics that were addressed in the messages that were developed.

2.2 Development of messages

The decision regarding what topics to develop messages for was informed by the analysis of the content of the Handbook against the Safe System principles (as described in Section 2.1). The Elaboration Likelihood Model, a well-established theory of persuasion (as described in Section 1.4), informed the message delivery. An expert panel reviewed the messages (as described in Section 2.3.1). The messages were revised to incorporate the comments of the expert panel before being exposed to scrutiny by two focus groups (Section 2.3.2). The final messages (presented in Appendix A), were revised to incorporate the comments of the focus group participants.

2.3 Review of the messages

2.3.1 Expert panel

The role of the expert panel was to provide informed opinions of the messages, and make suggestions for improvements.

Members of the panel

Members of the panel included Dr Peter Cairney, Ms Kelly Imberger, Mr John Catchpole and Mr Ray Taylor. Both Dr Cairney and Mr Taylor are recognised experts in the broad field of road safety, with over 35 years experience each. Ms Imberger and Mr Catchpole are recognised experts in the field of young driver research and have experience in the redevelopment of driver handbooks and licensing systems. Summaries of the panel members' CVs are included in Appendix B.

Procedure

One working day before the discussion, panel members were provided with a background document to peruse. The document gave them the project background and the initial ideas for messages to incorporate into the handbook.

The expert panel discussion took place at ARRB head office on 10 March 2009 at 10 am. Ms Victoria Pyta chaired the discussion, which was audio-recorded. The chairperson guided panel members to discuss the project concept and then to discuss the proposed messages.

2.3.2 Focus groups

The purpose of the focus groups was to test the acceptability and credibility of the messages to the main target group, learner and newly-licensed drivers.

Recruitment of participants

Advertisements were placed in the four local newspapers distributed in the ACT for one week (i.e. the City, Northside, Southside and Queanbeyan Chronicles). Flyers were also displayed at the Canberra Institute of Technology and the University of Canberra and distributed at a Road Ready Plus session.

Eight out of the twelve participants had responded to the advertisement in the local newspaper. Three others were informed of the focus groups by a parent or friend. Only one found out about the focus groups from a flyer at university or TAFE. One person who was in the right age group and responded to the advertisement was not available on the night that the focus groups were held and one person who was recruited did not attend.

Participants

The expert panel recommended that participants be restricted to younger than 25 years of age as this is the primary target audience of the Handbook. Due to the distribution of ages of respondents to the advertising, participants ranged in age between 16 and 20 years. More information on the characteristics of the participants, including licensure, is provided in Section 3.3.

Materials

Materials presented to participants were a booklet of messages. These are presented alongside the results in Section 3.

Procedure

The focus groups took place at Olim's Hotel in Ainslie, Canberra at 6 pm and 7.30 pm on Monday 30 March 2009. Participants were welcomed on arrival and introduced to the facilitators, Dr Tanya Styles and Ms Victoria Pyta.

Participants were asked to (1) read and sign an informed consent form that explained their rights as a research participant and how their confidentiality would be maintained; and (2) fill out a short survey. They were encouraged to ask questions. Participants were seated around a meeting table and informed that the focus group discussion was to be audio-recorded. Once all participants had arrived they were told about the background of the project. Participants were informed that:

- They were going to be shown some messages that were being proposed to be included in the *ACT Road Rules Handbook.*
- The messages related to a concept called the Safe System which was the philosophy that underpinned government strategies around Australia for reducing road trauma.
- The purpose of the focus group was to gather their honest thoughts about the messages.
- ARRB Group is a road transport research consultancy.
- The facilitators, Dr Tanya Styles and Ms Victoria Pyta, were behaviouralists working in the area of road safety.
- The NRMA – ACT Road Safety Trust was funding the research.
- Participants were free to withdraw their consent at any time.
- Participants were free to offer differing opinions because the aim of the exercise was open discussion and not consensus.

This information was followed by a short ice-breaker whereby each participant was asked to say their name, how often they drove and what they thought of when they heard the words 'road safety'.

Once the focus group discussion commenced, the general procedure was to read out the message text to participants and then ask one or more of the following questions: (1) 'How relevant do you think that message is?'; (2) 'How realistic or credible is that message?'; and (3) 'What strategies do you think would be effective to avoid that risky behaviour / promote safe behaviour?' The purpose of the questions was to establish whether the message was perceived as relevant, whether it was credible and what, if any, strategies the young drivers had to combat risky behaviours. Where necessary, participants' responses were probed for clarification or more prompts were given to generate conversation on the topic.

At the conclusion of the focus group, each participant was given $50.

3 Results

3.1 Review of the *ACT Road Rules Handbook*

The handbook was reviewed to determine:

- what safety information it contained
- how the information was communicated
- how the Safe System concept might be embedded
- how the existing information could be better communicated to indicate the relationship to the Safe System.

The most direct and obvious relationships between driver behaviour and crash outcome when considered from the Safe System perspective are between (1) speed and impact forces and (2) restraint wearing and survivability of crashes. Consumption of drugs and alcohol, fatigue and distraction also influence travelling speed, likelihood that a restraint will be worn and likelihood that a crash will occur. Vehicle choice and maintenance is another facet of the Safe System over which road users exert control.

Appendix C gives an overview of the process of gaining a driver licence in the ACT. A review of the Handbook reveals that factual messages about the relationship between speed and braking distance, seatbelts and drugs and alcohol are already well documented in the Handbook (see Table 3.1). However, fatigue is not mentioned and distraction is only mentioned insofar as it relates to mobile telephone use.

Table 3.1: Summary of safety content of *ACT Road Rules Handbook*

Aspects of Safe System relevant to road user behaviour	Factual information included in handbook?	Communicated relationship to the Safe System?
Vehicle choice	No	–
Vehicle maintenance	Yes	No
Fatigue	No	–
Drugs and alcohol	Yes	No
Seat belt wearing	Yes	No
Safe speeds	Yes	No
Distraction (inc. passengers, eating, mobile telephones and other in-car ITS)	Mobile phone only	No

Several ideas for messages were developed from this initial review of the handbook. They can be found in Appendix D. These messages were reviewed by the expert panel and then focus groups were asked to comment on the revised messages. The revised messages and the focus group responses are discussed in Section 3.3.

3.2 Outcomes of the expert panel

Suggestions from the expert panel were used to improve the way the concept of the Safe System is recommended to be communicated in the Handbook. The more context-specific outcomes of the panel discussion were used to finetune the messages in Section 3 before they were presented to focus group participants. The panel agreed that incorporating the Safe System philosophy into the handbook would fulfil the following objectives:

- *informing road users about the concept of Safe System and then encouraging them to implement*
- giving road users *…a different way of approaching the driving task; what their responsibilties are… how they fit into the system…*

One panel member suggested that considering the common motivational factors for high risk behaviours might be an effective way to personalise the message for the reader. There has been some considerable research in the area. Some motivational factors for high-risk behaviours among young drivers are listed in Section 3.2.1.

Seatbelts

A message regarding seatbelts was not presented to focus group participants because the opinion of the expert panel was that, at present, there is a very good culture of seatbelt wearing in Australia. It is recognised that a disproportionately high percentage of vehicle occupants killed in crashes in Australia were not wearing their seatbelt. However, because wearing rates among the general population are very high (Pennay 2008; Roberts 2006) a strategy specifically targeting segments of the community who have low seatbelt wearing rates is likely to be more effective than using the Handbook, which is designed for a broad audience. Adding material that is not personally relevant to the majority of readers would increase the length of the Handbook, which is already perceived by some as being too long. This increases the likelihood that some learners will not make the effort to read the Handbook.

In addition, the material on seatbelt use that is already in the Handbook may benefit from rewording to clarify the place of wearing a seatbelt in the Safe System. For example, the relationship between wearing a seatbelt and the effectiveness of airbags could be briefly highlighted. Seatbelts are a crucial part of the Safe System, but more benefit is to be gained in the Handbook (which targets the general population of pre-learner and learner drivers) by giving more attention to more widespread problem behaviours.

3.2.1 Motivational factors for high-risk behaviours among young drivers

High risk behaviours include: speeding, drink driving, driving when fatigued or distracted and not wearing a restraint. Some of these behaviours are more prevalent in the community than others. For example, Australians generally have a very good record for wearing seatbelts. Seatbelts are not discussed in this section on motivational factors for this reason.

Speeding

Speeding by drivers is an immense challenge for the Safe System and it is one of the most difficult driver behaviours to combat. It is also one of the most common risky driving behaviours among young drivers (Smart et al. 2005). ‘Keeping up with the traffic flow’ or feeling pressured by other drivers to drive faster is a powerful motivator for many young drivers, and passing and overtaking vehicles is a powerful motivator for some. Many believe they can judge when it is ‘safe to speed’, and that speeding is more prevalent than it really is (Corbett et al. 2008; Read, Kirby & Batini 2002). Further, because they believe it is prevalent, they also infer that it is socially acceptable.

Fear of getting caught by police and of crashing is a concern for young drivers that can influence their decision not to speed depending on how likely they think they are to crash or be caught (Morphett, Leicester & Span 2005). However, drivers are not always aware of their speeding (Corbett et al. 2008).

Drink driving

Fear of getting caught is also a major factor in drink driving. However, attitudes, beliefs about one's ability to control a vehicle after drinking and subjective norms are also very good predictors of whether a person will engage in drink driving behaviour (Marcil, Bergeron & Audet 2001).

Thus, the social shift towards disapproval of unsafe driving behaviours may have had more of an effect on drink driving than speeding because:

1. Drinking is usually a much more 'social' activity than speeding, allowing social norms to exert a much stronger influence.
2. Upcoming generations of drivers with no experience of drink driving have had no experience to counter the road safety messages they have been exposed to for most of their lives.

Fatigue

Driving while fatigued is relatively common among young drivers (Smart et al. 2005). Many drivers do not realise that they are fatigued, and many would not stop driving if they did as they may have time pressures or fear being judged as 'weak' for not being able to just continue to their destination (Haworth 1998). They experience tangible rewards if they do get to their destination and potentially negative consequences if they stop (e.g. being late, losing money, and/or feeling unsuccessful). At best, they will feel that they have done the right thing if they stop, and for some people this is a weak motivator.

Distraction

Younger drivers are much more likely to engage in distracting tasks than older drivers. They tend to believe that they are better at using technology than older generations and may even take pride in their ability to 'multi-task' (Lerner, Singer & Huey 2008).

3.3 Outcomes of the focus groups and development of final messages

3.3.1 Age and gender of participants

The age profiles of the two focus groups are shown in Table 3.2 and gender split is shown in Table 3.3.

Table 3.2: Age of focus group participants

Current age	Group 1	Group 2
16	2	2
17	1	2
18	0	2
18	0	0
20	3	0
Total	6	6

Table 3.3: Gender of focus group participants

Gender	Group 1	Group 2
Female	4	3
Male	2	3
Total	6	6

3.3.2 Licence types held by participants

Participants were asked about the type of licence that they held and how often they drove. Table 3.4 shows that one participant was a pre-learner, six were learner drivers and five were provisional licence holders. There was nearly an even number of participants with learner licences and provisional licences. The learner licence holders reported that they drove as infrequently as once every three weeks to as frequently as two or three times per week. The provisional licence holders typically drove every day. Most participants had obtained their learner licence at the age of 15 or 16 years (Table 3.5). Of those who held a provisional licence, most obtained it at the age of 17 (Table 3.6). These figures are provided to describe the characteristics of the focus group participants. They should not be interpreted as a representative sample of all young drivers in the ACT.

Table 3.4: Licence type held by focus group participants

Licence type	*Group 1*	*Group 2*
None (pre-learner)	0	1
Learner	3	3
Provisional	3	2
Total	6	6

Table 3.5: Age on acquiring learner licence

Age on acquiring learner licence	*Count*
15 years	5
16 years	4
17 years	1
18 years	1
n/a	1
Total	12

Table 3.6: Age on acquiring provisional licence

Age on acquiring provisional licence	*Count*
17 years	3
18 years	1
20 years	1
n/a	7
Total	12

3.3.3 General themes

Comments and discussion that are specifically related to the messages will be presented alongside the relevant messages. In addition to the specific comments, the following general themes emerged from the focus groups.

Participants appeared to enjoy the opportunity to critique the messages and suggest improvements.

Participants welcomed messages that:

- were brief and simple – *It's good 'cos it stays simple… It's not pages of stuff to read… …because it's brief points and … there's only 3 points for each passage.*
- provided a realistic depiction of the problem and took a problem solving approach, highlighting what they could do, not just lecturing them about what not to do – *yeah, it's not just a blanket 'don't do this' like a lecture you get from your parents*
- were realistic and respected their intelligence – *who would do that?*
- were up-to-date – *…they showed us a video of this one girl who'd been in a car crash and so on and so forth, and now she was, like, severely disabled, but it was from like the early 90s, so you just… couldn't concentrate on what was going on 'cos you were too busy laughing… laughing at the mullet.*
- were supported with a few brief demonstrable facts – *yeah I think it's more relevant than pretty much harping on about how everyone's gonna die if you drive. …it's all important info that you need to know, but yeah, just lighten it up a little bit.*

Of concern was a strong feeling among many participants that the handbook was already too long and that it was easy to pass the learner licence test without reading the book.

> *…it was just too big. I just went, nah, bugger it. I'll just do the test.*
>
> *I did attempt it. Got maybe halfway through it and just gave up. It was too long.*
>
> [in relation to the test] *I mean, it's mainly common sense anyway.*
>
> *…you get kids that fail once or twice, that's fair enough. But then, we had some girls in our class that failed like 16 times and they still got their Ls on the 17th time. And, it's kinda like, after you've failed that many times do you deserve your Ls? Have you learnt anything from the course? Should you redo it? The teacher's just like 'have another go… have another go,' like 16 times.*

Given comments like these, it was considered that the best additions to the handbook would be short ones.

3.3.4 Safe System concept

On arrival, focus group participants were presented with the Safe System diagram in Figure 3.1 and a survey that asked them:

1. 'From looking at the diagram, what does safe system mean to you?'
2. 'How would you describe the driver's role in the Safe System?'

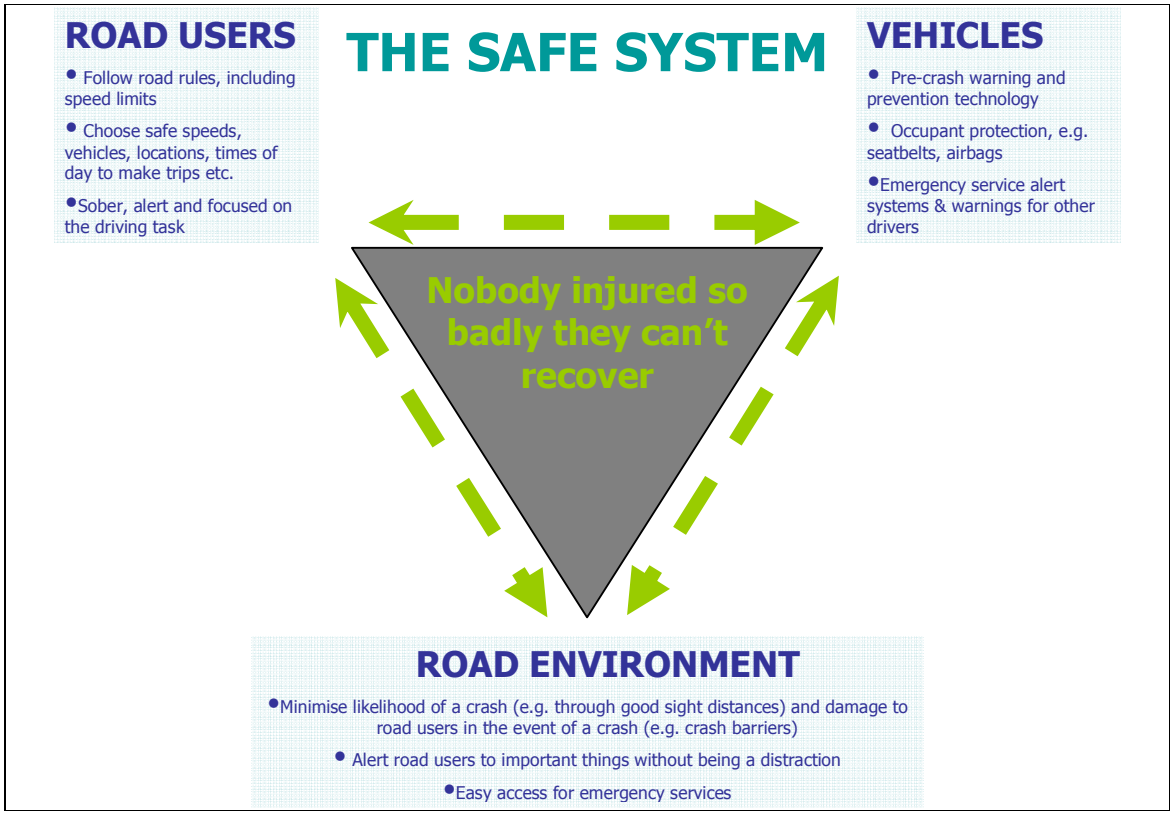


Figure 3.1: The Safe System – diagram presented to focus group participants on arrival

Their handwritten responses are collated in Table 3.7. Answers were variable but most mentioned or described in different ways the three elements that contribute to road safety. Some also indicated that the elements were 'intertwined' or 'worked together'. When describing the role of the driver in the Safe System, there was a sense that the driver was the most important element. Although this is not in accordance with the principles of the Safe System, it is not necessarily a notion that should be disabused among the driving public. It was generally understood that following rules, being alert and making safe driving decisions were important contributions that drivers were able to make to the Safe System.

Table 3.7: Focus group participants' understanding of the Safe System diagram[3]

What does safe system mean to you?	*Describe the driver's role in the Safe System*	*Age and gender*
… elements of driving. Road rules… and being safe. …summarises the elements of road safety.	The 'safe system' is all about the driver. The driver holds lifes in their hands. It is their responsibility to stick to the road rules and drive safely for the benefit of themselves and others.	Male, 20
…all elements of driving – drivers, the vehicles & the environment of the road/traffic are safe, so that all work in unison.	Very important – the environment and vehicles are important to the whole function of the roads, but driver decisions are what 'make or break' a situation…	Female, 16
…be aware of your actions and how it will affect you and the others around you.	As the most important – the driver is the one in control – center – at what's going on.	Female, 20
Being alert and aware		Female, 20
Safe driving, win-win situation, it is up to three factors to make sure everyone is safe on the road – 1. road users; 2. vehicles; 3. road environment	Drivers have a large role in making the 'safe system work'; important; drivers have to keep to the road rules and be alert for the safety system work.	Female, 16
Has to make the road a safer place; what you can do to prevent crashes; tells drivers what safety precaution they can take.	The driver has to be aware of the 'safe system'; the driver has to take in all the knowledge and apply it	Male, 17
Controlling 3 key areas to ensure driver safety; focuses on eliminating / reducing road toll; highlight the areas which drivers should focus on to ensure their safety (speed limits, staying alert etc.)	Taking responsibility for their road habits; planning trips in advance; staying within the road rules and alert to the environment around them.	Female, 18
That the safety messages stated all intertwine and serve the same purpose of 'nobody injured so badly they can't recover'; that there are several factors that all contribute to road safety	To make conscious decisions to follow road rules; compliment the other factors contributing to road safety	Female, 18
Rules and regulations to avoid injury or accident such as follow speed limits and other road rules; remain sober and under the limit if planning to drive; use safety equipment provided like, seatbelts, airbags etc.	Don't drink ☺, follow road rules and signs, stay under the speed limit	Female, 17
Its all aspects of road use: people; vehicles; environment.	Sober, slow driving, sensible use of road & interactions with surroundings	Male, 17

[3] Handwritten responses are transcribed here verbatim, including grammar and spelling errors.

Once all participants had arrived and been given an opportunity to respond to the diagram, the focus groups began. Participants were shown Figure 3.2. The text was read out and participants were asked 'How well do you think the diagram reflects what is said in the text?'

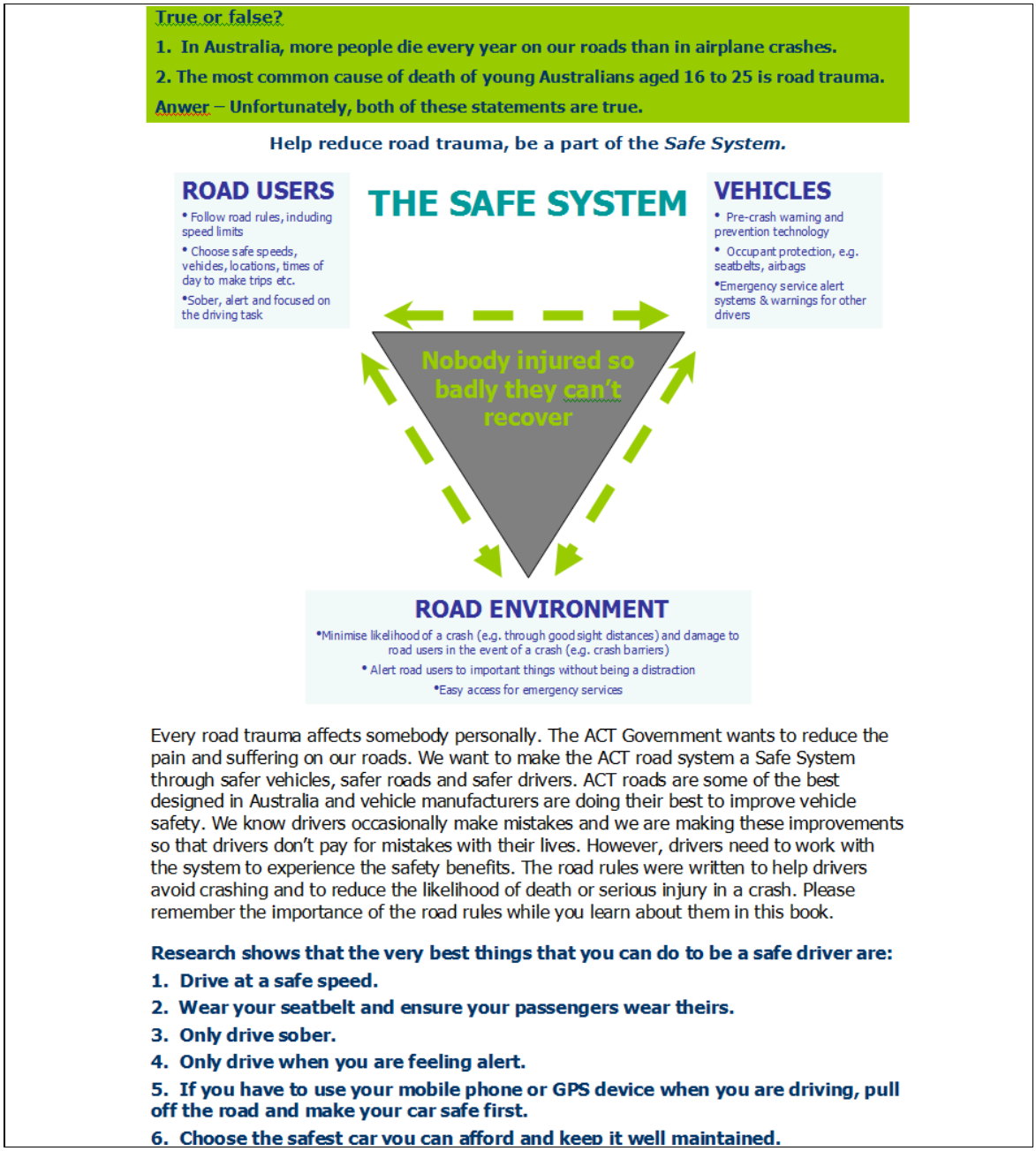


Figure 3.2: The Safe System – diagram and text presented to focus group participants

Discussion of how well the diagram reflected the text

Most agreed that the diagram reflected the text reasonably well. On the one hand, participants liked the diagram because it was simple and quick to comprehend:

> *I reckon the diagram's pretty clear, it shows all the aspects of what happens when you're on the road and the dangers and stuff*
>
> *…you can just skim over it and go 'oh yeah'…*
>
> *It's good 'cos it stays simple… It's not pages of stuff to read…*
>
> *…because it's brief points and … there's only 3 points for each passage.*

Conversely, some preferred the text because:

> *'…[the diagram is] sort of all over the place, whereas I found the text was simply written, and it was just a little bit easier to understand … I think, it's because you're not entirely sure where to read first, and you're not totally sure which is relative to which bit, or something.*

Generally it was felt that the text reflected what was in the diagram but added more depth, whereas the diagram gave people who were unlikely to read the text a sufficient understanding of the message.

Appraisal of the diagram

There was criticism of the wording in the grey triangle 'nobody injured so badly they can't recover' as it was felt that:

> *It doesn't connect with the other things because the other things are saying things to prevent negative events. Like, it makes it sound like everybody's unavoidably going to be injured.*
>
> *I think the top part [Help reduce road trauma… be part of the Safe System] helped… it could go in the middle instead.*

There was general agreement about the last two points. The final diagram has been revised to reflect this (Figure 3.3).

There was also a sense that the diagram:

> *'…sort of makes road environment look less important than road users and vehicles, because they're up the top…'*

Although this is not the intention of the Safe System philosophy, it is considered acceptable given the intended audience for the diagram.

Appraisal of the text

Later discussions revealed that the term 'serious injury' did not conjure in participants' minds the type of consequences that are envisioned by road safety professionals. Participants suggested more concrete and operationalised terms:

> Participant: *…dying isn't the worst thing that's gonna happen to you. You know, they'll be long term injuries for the rest of your life kind of thing.* Facilitator: *So, maybe we need a*

better word than serious injury… something more specific? Participant: *Like a life-affecting...* [general agreement] Participant: *Life changing* [more agreement]

The term 'life-changing' was adopted in the final diagram (see the last sentence, Figure 3.3).

Summary

- From looking at the diagram alone, most participants understood there are three elements that contribute to road safety: road user, vehicle and environment. Some also indicated that the elements were 'intertwined' or 'worked together'.
- There was a sense that the driver was the most important element and that following rules, being alert and making safe driving decisions were important contributions that drivers were able to make to the Safe System.
- The simplicity of the diagram was generally appreciated.
- Most participants felt the diagram summarised the text well enough for people who would be unlikely to read the text.
- Most participants felt the text added depth to the information contained in the diagram.
- It was suggested that the heading 'help reduce road trauma… be part of the Safe System' could go inside the triangle instead of 'nobody injured so badly they can't recover'. The latter statement was considered to imply that everybody was unavoidably going to be injured on the roads. These comments are reflected in the final diagram, although the words have been changed slightly to 'help *eliminate* road trauma'.
- It was suggested that a more descriptive term like 'life-changing injury' would be more effective than 'serious injury'. This change was made in the final diagram.
- Other changes in the final diagram included further simplification and removal of non-essential text.

Every road trauma affects somebody personally. The ACT Government wants to reduce the pain and suffering on our roads. We want to make the road system a Safe System through safer vehicles, safer roads and safer drivers. ACT roads are some of the best designed in Australia and vehicle manufacturers are doing their best to improve vehicle safety. We know drivers occasionally make mistakes and we are making these improvements so that drivers don't pay for mistakes with their lives. However, drivers need to work with the system to experience the safety benefits. The road rules were written to help drivers avoid crashing and to reduce the likelihood of death or life-changing injury in a crash.

Figure 3.3: The Safe System – final diagrammatic and textual representation

3.3.5 Safe speeds

Participants were shown Figure 3.4 and asked how realistic the statistics about speed seemed to them (i.e. 'if you hit a pedestrian at over 30 km/h they are unlikely to survive etc.).

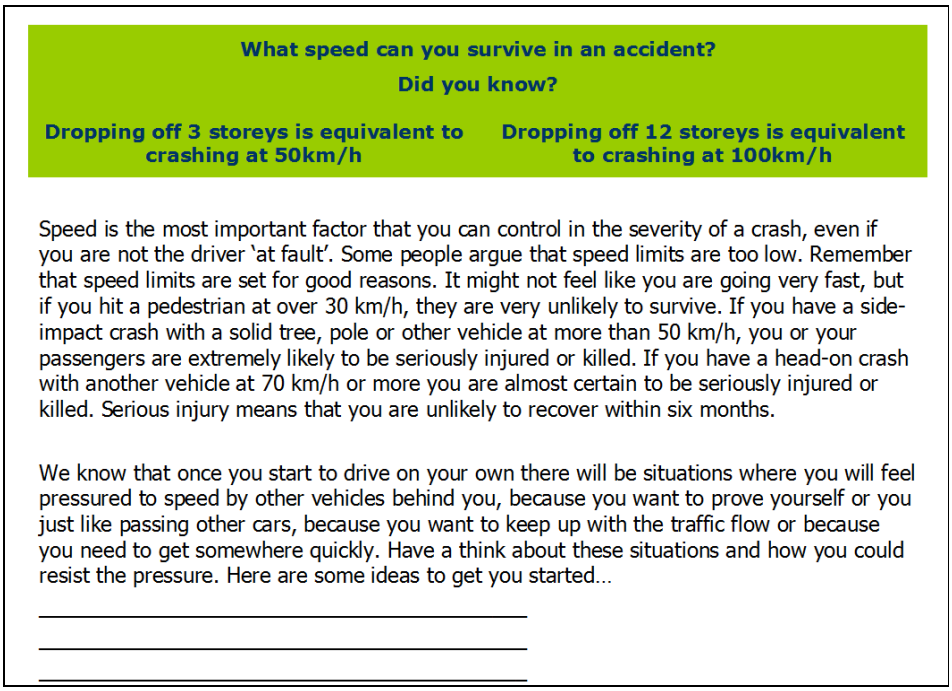


Figure 3.4: Speed and crash outcomes

Most agreed that they were realistic. Whereas some liked their realistic and factual nature, some found it difficult to relate.

> *They seemed realistic, but they don't feel the way they're said.*

> *I think that the use of like, statistics, rather than just generalising, like it sort of had more of an impact…*

> *Yeah, I mean it sounds about right. Like, you've got a door between you and a tree, you're going at 50 K. It's like, the tree's gonna own you pretty bad… Yeah, like I think if you chuck in a couple of those statistics then I'll be like 'oh shit, you know, like you can actually do yourself a bit of damage.*

> *I think if you put some stats like these in it, a bit sparingly, people would pay attention to it, cos like 30 ks an hour, like no-one drives at that.*

It was generally felt that there was too much text and some things didn't need to be said.

> *…it's all important info that you need to know, but yeah, just lighten it up a little bit.*

> *It's got … stuff in it that it doesn't need to be said. … Yeah, like 'some people argue that speed limits are too low'. Well, it's like, we know that.*

Some participants criticised the 'action film' style of the 'did you know?' questions at the top of Figure 3.4.

Who's going to drive off the top of a building though? … I wouldn't drive off a building and crash.

No-one would do it. It's stupid. I don't think it's really relevant at all.

Others thought it really illustrated the point.

Well, it's saying 50 ks an hour when you're in a car is not that fast, but when you put it that way, like 3 storeys, it's pretty… yeah

One participant suggested that pictures of what happened to cars at the different impact speeds might have more of an impact.

…ones where you crash where the whole steering wheel pushes up… scares people because you don't want that to happen. Yeah, you can see what happens to your car and you get scared. Maybe you could have like a fake picture of like, the tree, and what the car would look like crashed into it.

Participants were then presented with Figure 3.5 and asked which scenario was better.

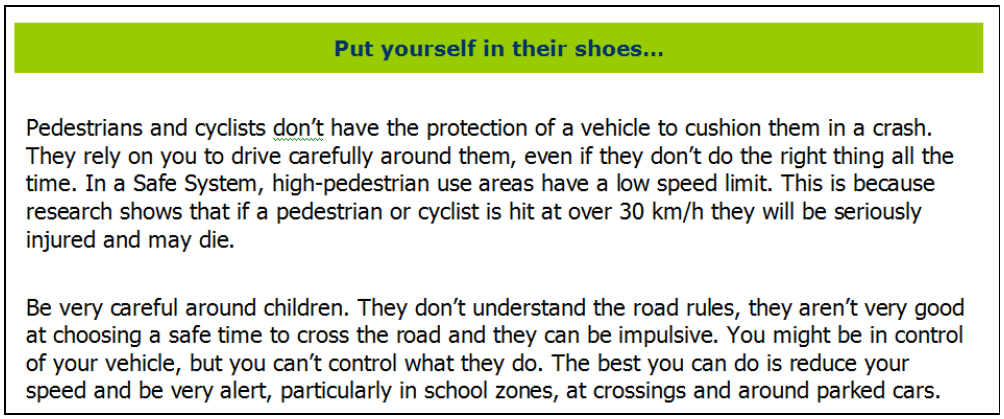


Figure 3.5: Speed and crash outcomes – focus on pedestrians and cyclists

Participants liked some things out of Figure 3.4 and some things out of Figure 3.5 and generally thought that selected parts of the two should go together. Whilst participants thought the statistics were necessary, they generally thought they should be shorter and pithier, possibly bullet pointed.

I guess the first one is better at making people worry about themselves.

I guess this one mentions children. That's effective. It's more worse if you kill a child.

Harming little kids sucks.

And because it says that, um, you're in control of the car but not in control of what the pedestrians are doing it's putting you in the reality that you know things are going to happen around you.

…join them together … have both of them which would be good… simplify this one a bit [referring to Figure 3.4]

Summary

- Most agreed that the human tolerance threshold statistics were realistic. However, whereas some liked their realistic and factual nature, some found it difficult to relate.
- Most agreed that the second message was more effective because (1) it had an emotional appeal relating to not wanting to hurt children; and (2) it reminded them that while they might be 'in control', they could not control what others did, particularly children.
- Suggestions for improving the messages included:

  – join the two messages together

  – do not say things that are obvious and generally economise on the text

  – bullet point the statistics and illustrate with pictures of crashed cars.

These suggestions have been incorporated into the final message in Figure 3.6.

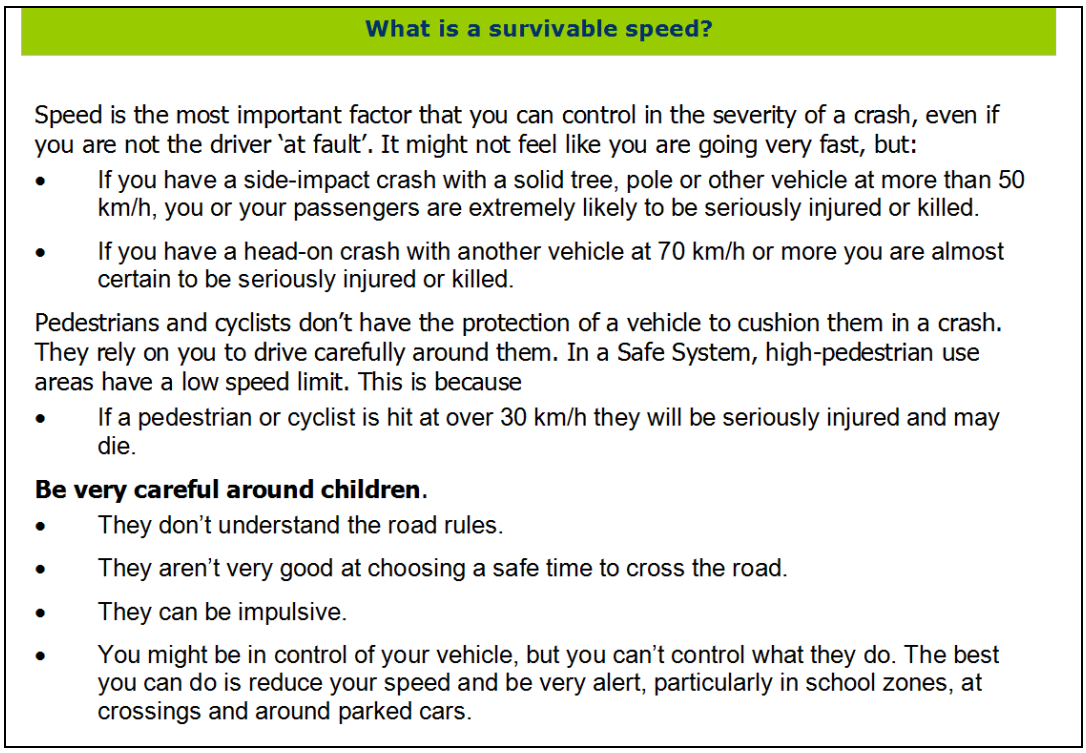
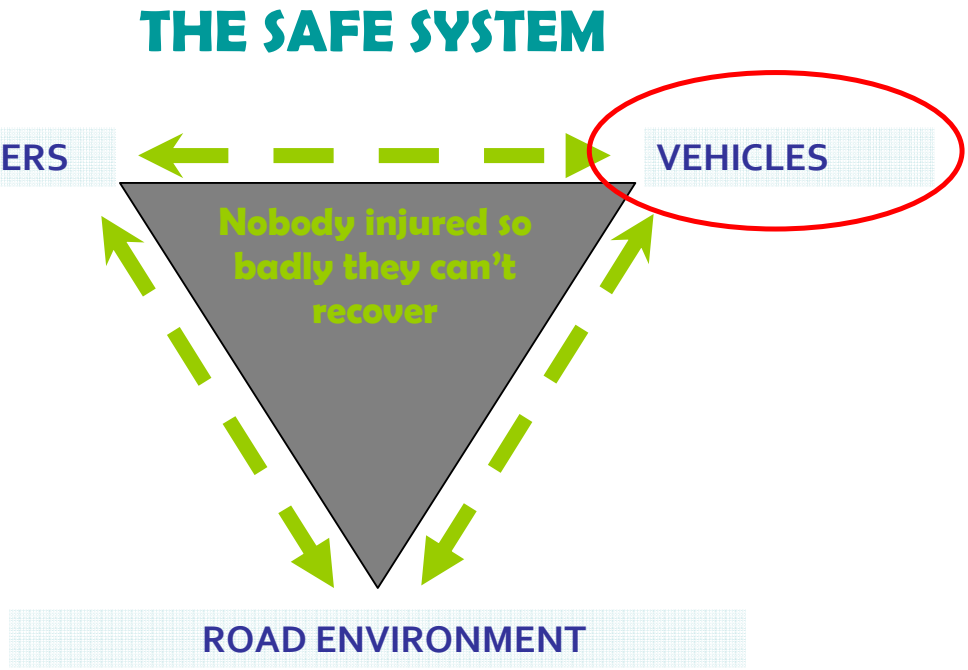


Figure 3.6: Safe speeds – revised message

3.3.6 Safe vehicles

Participants were presented with Figure 3.7 and the facilitator asked 'What did you already know?'

Having a Safe Vehicle is important if you want to be part of the Safe System



In a Safe System, vehicles are designed to protect the people in them as well as other road users like pedestrians and cyclists in an accident. Some rules of thumb are that newer cars are generally safer than older cars; and, larger cars tend to protect the people in them better than smaller cars.

You can compare car safety ratings on this website:

http://www.howsafeisyourcar.com.au/

Choose the safest car you can afford and keep it well maintained.

Figure 3.7: Choosing a safe vehicle – diagram and text presented to focus group participants

Most participants initially thought the information was common sense,

> *Well, yes, it's pretty much logical…*

However, only a few participants were aware of the website. Among those that were not aware of the website, opinions were mixed about whether it would affect their choice of a vehicle, especially their first vehicle. Some thought it was very useful information:

> *I hadn't heard of the website before. That's useful information that I can remember.*

Whilst others thought that buying a first car was a matter of getting:

> *whatever, like the cheapest thing they can get, or if, you know, their parents are forking out, the nicest looking thing they can get… but I don't think people really care about safety... It's like, whatever… I won't die, I'm young…*

One participant opined:

> *That might be effective if you're aiming it at the family market cos… You might guilt them into buying something to protect their kids…*

There was also criticism of the 'rules of thumb' statements:

> Participant 1: *…it says larger cars tend to protect the people within them better, but then perhaps say, 'but can harm the people outside more'* Participant 2: *Yep, we don't want people in cars to think it would be good for everyone to go out and buy a big four wheel drive or something*

> Participant 1: *...it's the specific car, not the size or shape. It's the specific make of the type of like…* Participant 2: *Yeah because that kind of, it indicates that that's the correct idea… cos it says some rules of thumb are bla bla bla* [sic]*. It doesn't say that those aren't necessarily true.*

At the same time, there was awareness that tying the safety of a vehicle to its size did not accord well with currently popular notions of fuel-efficiency and environmental friendliness:

> *…it also has an effect on like pollution and stuff… one person in a six-seat car…*

> *Cos it's about petrol costs, whereas 'oh I run a little car', like no one wants to drive a big safe car.*

One participant also drew attention to the fact that larger cars are often high-powered vehicles and may not be appropriate for novice drivers:

> *People should have practical cars… if you're inexperienced you shouldn't have a really big powerful car.*

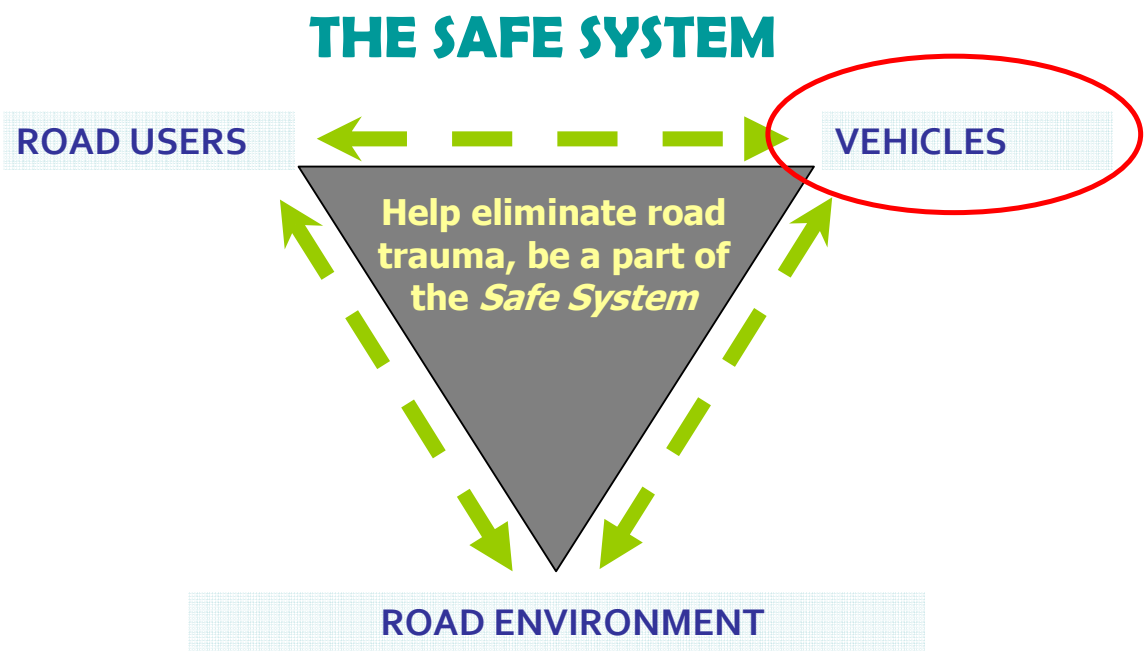
Summary

- Most of Figure 3.7 is perceived as logical and credible.
- There was criticism of credibility of the 'rules of thumb' statements because they over-simplified matters and were potentially misleading. These have been removed from the final diagram (Figure 3.8).
- There was a low level of awareness of the 'How safe is your car?' website, which gives new and used car safety ratings. The NRMA website has also been referenced in the final diagram, as it provides a useful one page reference of used car safety ratings.
- Opinion was split on whether the 'How safe is your car?' website would be useful for novice drivers. Some thought it would be very useful, while others doubted it would due to competing

motivations such as buying the cheapest car they could find or the most attractive car they could afford.

- Some pictures of cars going through the crash testing process may assist in drawing the readers' attention to this issue.

Having a Safe Vehicle is important if you want to be part of the Safe System



In a Safe System, vehicles are designed to protect the people in them as well as other road users like pedestrians and cyclists in an accident.

The NRMA provides easy reference tables for comparing the safety of used cars on their website:

http://www.mynrma.com.au/used_safety_ratings.asp/

You can find new and used car safety ratings on this website:

http://www.howsafeisyourcar.com.au/

Choose the safest car you can afford and keep it well maintained!

Figure 3.8: Choosing a safe vehicle – final diagram and text

3.3.7 Other driver behaviour issues relevant to the Safe System

Drink driving

Participants related well to the vignette in Figure 3.9.

> *People don't often talk about the emotions but the emotions play a really big part. Like, the connections that you have with the other people. … People may not be putting pressure on you, but you can feel like you're betraying them or something.*

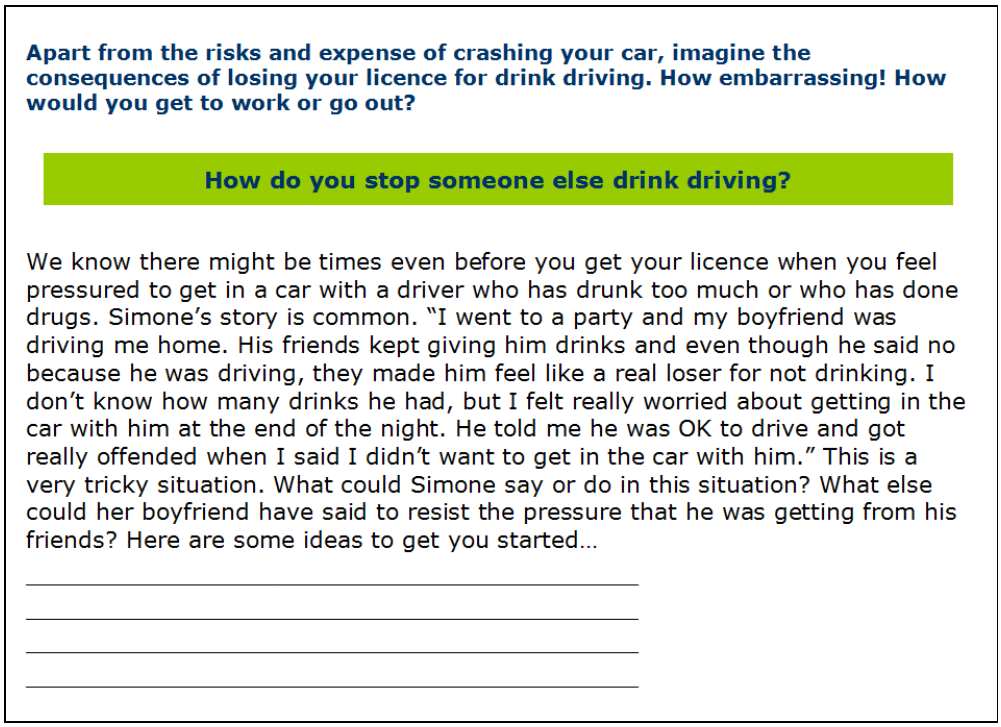


Figure 3.9: Drink driving – text presented to focus group participants

Participants thought that the best way to avoid drink driving or getting in a car with a driver who had been drinking was to discuss and pre-arrange other ways to get home. If the problem only became apparent at the event, they suggested leaving early, finding alternative ways of getting home (e.g. taxi, telephone a friend or family member, ask others at the event) or staying the night. Some participants also expressed the opinion that people were generally predictable and another longer-term strategy was for people to choose their friends more carefully!

It became apparent that participants did not consider drink driving prevalent among their age group. In general, participants' opinions of drink driving were that:

- Drinking and driving was thought to be more of an issue for older generations of drivers.

  Participant 1: *Well, it's still relevant but, because of ads on TV and stuff, it's becoming really taboo.* Participant 2: *Yeah, I reckon.* Participant 3: *Oh, some people are just like, they would do it, but I find that, especially when you're so new to driving like people my age… they're not at the stage where they'll be like 'oh yeah, I've done heaps before I'll just, you know, drive home from the pub after I'd had six beers or whatever'… Some of my friends' parents are, whatever like, they'll have a million beers and they'll like try'n drive home or whatever, and then like we're all like, 'Dude, you're not driving home. That's the most stupid thing I've ever heard.' I think it's*

the young people that get the message more than the older people because it's been drummed into us forever.

- Drugs were considered a bigger issue for young drivers than alcohol, partly due to the lack of road safety education campaigns and visible enforcement in that area.

  I was… at a party… they'd been taking drugs but they waited at the party for an extra couple of hours… because they didn't want to drink and drive. Yet, they were off their faces on drugs and were willing to drive…

  I don't know anyone who knows about drugs and driving.

  There are no TV ads.

  You know the signposts that people put up targeting different things. They never target drugs.

  And I think because alcohol's so easily tested on your breath and you're so regularly tested that that's sort of the major deterrent for drink driving whereas drugs tend to be tested via a blood test which you can't do on the spot, so people don't worry about it.

  It's more fear of getting caught than fear of driving… consequences from the police rather than consequences from the actions themselves.

- Although drinking and driving wasn't believed to be prevalent among young drivers, drinking was seen as a widespread social problem among teenagers and twenty-somethings, sustained by a misconception that you have to drink to enjoy yourself and a perceived pressure to drink in order to 'fit in'.

  …a lot of people think you need to drink to have fun.

  I just started at a different school and it's like the only way they seem to have fun at a party is to drink and if you're not [drinking]… you're seen as a loser.

- Being a designated driver was seen as a socially acceptable way to sidestep the pressure to drink[4].

Summary

- The scenario was credible and most participants could relate.
- Participants thought that the best way to avoid drink driving or getting in a car with a driver who had been drinking was to discuss and pre-arrange other ways to get home.
- The issue of drink driving was not believed to be very relevant for their age group, due to drink driving being socially taboo and a preponderance of road safety campaigns that participants had been exposed to for most of their lives already targeting the issue. The social unacceptability of drink driving also made being a designated driver an acceptable way to sidestep pressure to drink.
- The issue of drug-driving was not well-understood and there was a sense that it was more socially acceptable (among some social groups) to take drugs and drive than it was to drink and drive, possibly due to the lack of awareness of the problem and possibly because drug driving is not as easily detected by police.

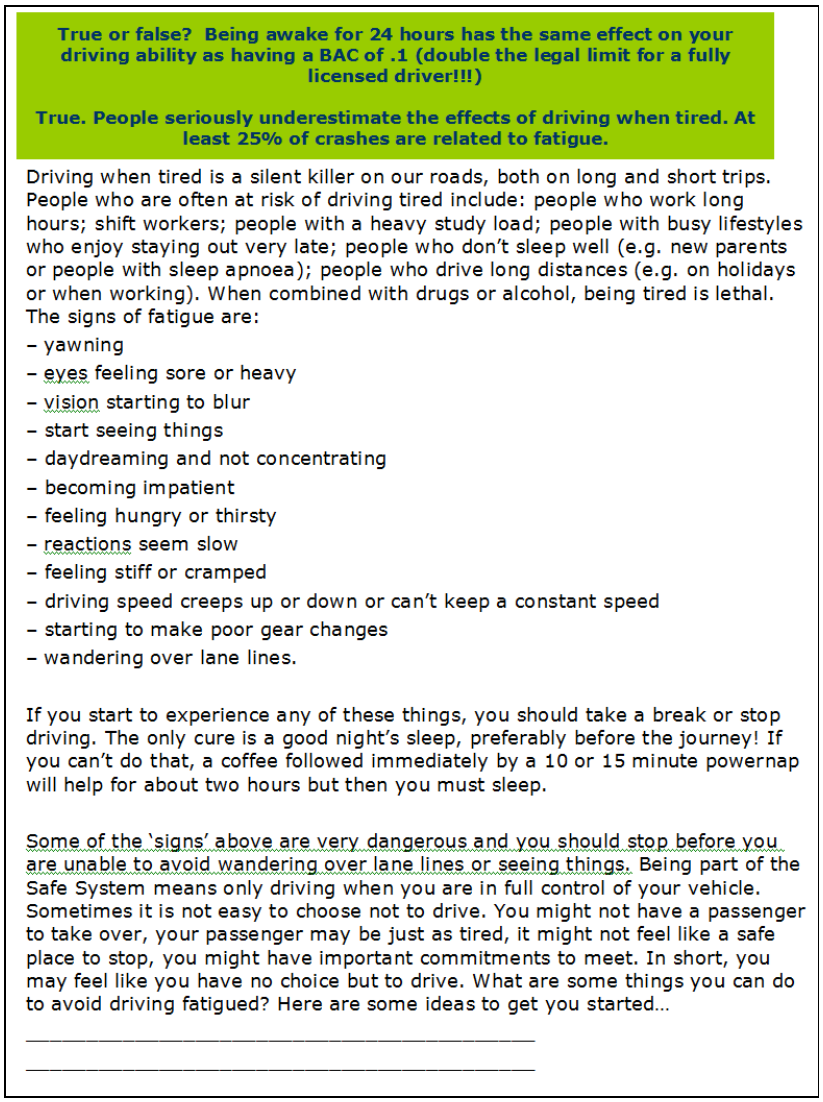
[4] Although it was slightly off topic, participants did highlight resentment towards changes to NSW law regarding the number of passengers that provisional licence holders can carry at night. They felt that there was a good culture of designated drivers that had been encouraged by the government and the new rules (although not applicable to ACT residents) were damaging and made 'people' feel 'stuck', frustrated and like they had no options but to drink and drive.

- Some participants believed the wider social problem of drinking needs to be addressed, not just as it relates to driving.
- The authors are hesitant to recommend adding material on drink and drug driving (that may not be perceived as personally relevant to the majority of readers) to the Handbook. The Handbook is studied before attainment of the learner licence and therefore, up to two years before solo driving becomes legal. Attitudes towards drugs and alcohol are influenced by social circumstances and these circumstances can change dramatically between obtaining a learner licence and gaining a full licence. Further, it is when young people are in a position to drive unsupervised that they will need salient strategies to maintain both their social status and commitment to safe driving in the face of peer pressure to do otherwise. Note that this is not a recommendation to remove the educational material on drink driving currently contained in the Handbook. Rather, it may be sufficient to reword the current text slightly to highlight that being a part of the Safe System requires sober driving.
- Outside of the Handbook, more education about drug driving and a more holistic health and social welfare approach to the issue of drugs and alcohol may be warranted.

Fatigue

Fatigue is not currently addressed in the Handbook. The message presented to focus group participants is shown in Figure 3.10. The message attempts to communicate to the reader:

- why fatigue is an important issue
- how it is relevant to them (both by identifying groups that they are likely to belong to and symptoms that they might not recognise as symptoms of fatigue)
- what they can do to avoid driving while fatigued.



True or false? Being awake for 24 hours has the same effect on your driving ability as having a BAC of .1 (double the legal limit for a fully licensed driver!!!)

True. People seriously underestimate the effects of driving when tired. At least 25% of crashes are related to fatigue.

Driving when tired is a silent killer on our roads, both on long and short trips. People who are often at risk of driving tired include: people who work long hours; shift workers; people with a heavy study load; people with busy lifestyles who enjoy staying out very late; people who don't sleep well (e.g. new parents or people with sleep apnoea); people who drive long distances (e.g. on holidays or when working). When combined with drugs or alcohol, being tired is lethal. The signs of fatigue are:

– yawning
– eyes feeling sore or heavy
– vision starting to blur
– start seeing things
– daydreaming and not concentrating
– becoming impatient
– feeling hungry or thirsty
– reactions seem slow
– feeling stiff or cramped
– driving speed creeps up or down or can't keep a constant speed
– starting to make poor gear changes
– wandering over lane lines.

If you start to experience any of these things, you should take a break or stop driving. The only cure is a good night's sleep, preferably before the journey! If you can't do that, a coffee followed immediately by a 10 or 15 minute powernap will help for about two hours but then you must sleep.

Some of the 'signs' above are very dangerous and you should stop before you are unable to avoid wandering over lane lines or seeing things. Being part of the Safe System means only driving when you are in full control of your vehicle. Sometimes it is not easy to choose not to drive. You might not have a passenger to take over, your passenger may be just as tired, it might not feel like a safe place to stop, you might have important commitments to meet. In short, you may feel like you have no choice but to drive. What are some things you can do to avoid driving fatigued? Here are some ideas to get you started…

_____

_____

Figure 3.10: Fatigue – text presented to focus group participants

Participants in both focus groups felt that the issue of fatigue was very relevant for their age group even for everyday trips.

> *Um, I can say a lot of the time, I'm really fatigued when I drive. Like, um, after training…*

> *I mean, I'm a uni student and I'm at uni four days a week and I work all weekend plus uni work at night.*

One or two participants felt that powernaps were 'good'. However, some were sceptical about their effectiveness and/or practicality. They have been left in the final message, as in reality they are one of the better methods of managing fatigue.

> *…you tend to feel more tired if like, you want to sleep, and then you only sleep for 10 minutes.*

> *Yeah, it's like, 'I'll just have a quick nap before I go here' and the nap turns into three hours and the next thing I'm like two hours late or something.*

15 minute nap, what a joke! It's gotta be like at least two hours to be worth it.

For learner drivers, the dot-point about speed creeping up and down was unhelpful for helping identify fatigue, as one participant noted that his speed crept up and down because he was still learning. Poor gear changes and wandering over lane lines would presumably also fall into this category. Although this criticism is valid, the dot-points are left in the final message (Figure 3.11) because one aim of the handbook is to prepare drivers for driving solo.

Participants generally felt that planning ahead was the only way to really combat fatigue, whether that meant arranging to have someone pick them up after a tiring sporting event, arranging to stay the night at a party or planning plenty of rest breaks on a long trip. The final message has been adjusted to emphasise this.

It's all about planning.

Participants also expressed some concern about the effects of fatigue for designated drivers.

I was thinking it's like relevant when it comes to designated drivers. Like, at parties, if you leave at five in the morning.

Summary

- Participants believed that fatigue was a relevant issue for their age group.
- Some participants were sceptical of the effectiveness and/or practicality of powernaps.
- Some learners found the 'signs of fatigue' a bit ambiguous because they were still developing skills, e.g. maintaining a constant speed.
- Participants believed that it was essential to plan ahead to avoid driving when fatigued, e.g. arranging to have someone pick them up, arranging to stay the night or planning plenty of rest breaks on a long trip.

True or false?

Being awake for 24 hours has the same effect on your driving ability as having a BAC of .1 (double the legal limit for a fully licensed driver!)

True.

Driving when tired is a silent killer on our roads, both on long and short trips.

People who are often at risk of driving tired include:

- people who work long hours
- shift workers
- people with a heavy study load
- people with busy lifestyles who enjoy staying out very late
- people who don't sleep well (e.g. new parents or people with sleep apnoea)
- people who drive long distances (e.g. on holidays or when working).

The signs of being tired or fatigued are:

- yawning
- eyes feeling sore or heavy
- vision starting to blur
- starting to 'see things'
- daydreaming and not concentrating
- becoming impatient
- feeling hungry or thirsty
- reactions seeming slow
- feeling stiff or cramped
- driving speed creeping up or down or can't keep a constant speed
- starting to make poor gear changes
- wandering over lane lines.

Some of the 'signs' above are very dangerous and you should stop before you are unable to avoid wandering over lane lines or seeing things. The only cure is a good night's sleep, preferably before the journey! If you can't do that, a coffee followed immediately by a 10 or 15 minute powernap will help for about two hours but then you must sleep.

Being part of the Safe System means only driving when you are in full control of your vehicle. Sometimes it is not easy to choose not to drive. You might not have a passenger to take over, your passenger may be just as tired, it might not feel like a safe place to stop, you might have important commitments to meet. In short, you may feel like you have no choice but to drive.

The best thing you can do is allow time in your schedule for a good night's sleep and plenty of rest breaks on long drives. If you find that you have developed a pattern of driving while fatigued, think about how you could improve your routine or whether you have alternative ways of travelling to where you are going.

Figure 3.11: Fatigue – final text

Distraction

A specific message for distraction was not presented to participants due to the time constraints of the focus groups. However, participants were asked, 'When I say driver distraction, what kind of things come to mind?'

Their responses were:

> *Mates in the car, music, other people around you and stuff… fiddling with the radio.*
>
> *Phones are a big thing like. Yeah, talking and texting probably.*
>
> *…when there's roadworks and a lot of stuff around like lots of road signs.*

Likelihood of using a mobile phone while driving was said to depend on who was calling, what kind of road environment they were in and whether they thought it was likely that police would catch them.

> *…for me it depends who's calling.*
>
> *Like I probably wouldn't do it around when there's lots of cars, but when I'm on my own you just drive in slow motion.*
>
> *And I only ever text at traffic lights, so that doesn't count! [laughter]*
>
> *…but sometimes if I'm driving by myself out on Cotter Rd, and you go, there's not gonna be any cops out there, and the phone rings, like you'll take it and you know you shouldn't but if it's your coach or something they've probably got something important to say. But if it was mum, I'd be like, yeah I'll take it in a moment.*

4 Discussion and conclusions

The objective of this project was to explore the possibility of introducing ACT drivers to the Safe System concept at the start of their driving career, through the medium of the *ACT Road Rules Handbook*.

With the assistance of the expert panel, the project team identified a number of parts of the Handbook where the Safe System concept could be introduced, and concepts relating to safe driving could be presented in a Safe System context. Core messages were developed that focussed on driver behaviours relevant to the Safe System. The most obvious of these behaviours are speeding and seatbelt wearing. Messages were also developed for drink driving and fatigue, as there are established relationships between these driver behaviours and likelihood of crash occurrence. The format of messages was informed by an established model of persuasion, the Elaboration Likelihood Model, with particular focus on personal relevance and credibility.

The concept of Safe System was generally well received by focus group participants, and it would seem that this approach is viable. Participants liked the simplicity of the concept and the fact that their role and responsibilities became obvious very quickly. From looking at the diagram alone, most participants understood there are three elements that contribute to road safety: road user, vehicle and environment. Some also indicated that the elements were 'intertwined' or 'worked together'. They thought that the diagram gave enough information to people who would not read the text, whilst the text added depth to the diagram. They tended to believe that the driver was the most important factor in the Safe System, and whilst this is not strictly true in the ideal of the Safe System, it is probably good that drivers perceive their role as an active participant in road safety. It was generally understood that following rules, being alert and making safe driving decisions were important contributions that drivers were able to make to the Safe System.

Participants in the focus groups generally accepted the Safe System messages:

- *Safe speeds:* The information on speeds and consequences in different circumstances was considered realistic even though the speeds themselves were not considered to 'feel' that fast. Participants were particularly receptive to the speed message that included children, partly because of the emotional appeal (it is socially unacceptable to harm children) and partly because it highlighted an irrefutable fact, that they could not control what others do, particularly children.
- *Safe Vehicles:* The message about safe vehicles was perceived as logical and some found the provision of the website location: www.howsafeisyourcar.com.au to be useful information that they would remember when buying a car.
- *Sober driving:* The importance of not drink-driving was so well-accepted that it became apparent that an additional message about drink driving is probably not necessary at present. Therefore, no final message for drink driving was produced.
- *Alertness:* Participants felt that fatigue was a very relevant issue for their age group, and that pre-planning was the only real solution. They felt that most of the listed symptoms were realistic. Pre-planning was also the favoured strategy for avoiding drink-driving.

However, there were reservations about some aspects of the messages presented to focus group participants.

- *Safe System concept:* Participants did not like the wording 'nobody injured so badly they can't recover' because they felt this implied that everybody was 'unavoidably going to be injured'. They felt that the word 'serious injury' did not communicate the seriousness of the outcome, preferring something like 'life-affecting' or 'life-changing'. 'Life-changing' was adopted in the final diagram, but further work could be done to develop this. Some participants found the multi-directional nature of the diagram confusing because they did not know where to read first. These participants preferred the text.

- *Safe speeds:* It was generally felt that there was too much text in the speed messages and that some things did not need to be said. The messages included to attract attention in the speed messages, ('dropping off a 3 storey building is equivalent to crashing at 50 km/h…') received mixed opinions, ranging from a feeling that it really illustrated the point to outright dismissal because 'no-one would do it'.
- *Safe vehicles:* Some participants thought that people in their age group would not take any notice of the safety ratings of cars in their purchasing decisions. As they had so little money, they would buy whatever they could afford. If they had more money then they would get the nicest looking vehicle they (or their parents) could afford. They also criticised the credibility of the 'rules of thumb' statements because they over-simplified matters and were potentially misleading. For example, the message could be taken to imply that larger vehicles were 'better' when in fact they only generally protect occupants better but can be more dangerous for vulnerable road users, produce more emissions and be more expensive to run.
- *Sober driving:* The issue of drink-driving was not believed to be very relevant as drink driving was considered socially taboo. The social unacceptability of drink driving was so well ingrained that being a designated driver was considered an effective way to evade social pressure to drink. However, the issue of drug-driving was not well-understood and there was a sense that it was more socially acceptable (among some social groups) to take drugs and drive than it was to drink and drive. Some possible reasons for this are a lack of awareness of the problem; a perception that drug driving is not as easily detected by police as drink driving; and the reality that taking drugs is more strongly associated with a general tendency towards risk-taking behaviour. There was a sense that a more holistic health and social welfare approach to the issue of drugs and alcohol in the community was warranted.
- *Alertness*: Participants were sceptical about the effectiveness and/or practicality of powernaps. Further, for learners, the dot-point about speed creeping up and down was considered unhelpful for helping identify fatigue as maintaining a constant speed is a skill that is still being learned. Other dot-points such as poor gear changes and wandering over lane lines could also be criticised on this basis, but they are good indicators once these skills have been learned as they show significant lapses in concentration. There was also concern expressed about the effects of fatigue for designated drivers.

Although a specific message for distraction was not presented to participants, participants were asked what they thought about when they heard the term 'driver distraction'. Participants' suggestions included a wide range of potential distractions, including: talking and text messaging on the mobile phone; tuning the radio; listening to music; talking to friends inside and outside the car; and environmental intrusions such as roadworks and road signs. When asked specifically about their mobile phone use when driving, the following factors were important: the personal importance placed on the call, the complexity of the driving task (i.e. at least one participant believed it 'didn't count' if you sent text messages whilst waiting at traffic lights) and whether they thought it was likely that police would apprehend them.

In general, participants appreciated simplicity and brevity. This is important, as there was a strong feeling among many participants that the Handbook was already too long and it was easy to pass the learner licence test without reading the Handbook. Participants welcomed messages that provided a realistic depiction of the problem and took a problem solving approach, highlighting what they personally could do about it, not just lecturing them like a parent or teacher about what not to do. They were highly critical of messages that appeared to insult their intelligence whilst commending messages that were supported with a few brief, demonstrable facts which told them something new (generally no more than three bullet points at a time). It is worth noting that participants were also critical of messages that, on the surface, appeared to be outdated purely because of the clothes or hairstyles worn by the characters delivering the message.

The 'problem solving' approach in the discussion was particularly successful in engaging participants. Participants appeared to enjoy the opportunity to critique and offer suggestions for improvements to the road safety messages. They particularly enjoyed offering their opinions about road safety

problems, and offering strategies and solutions. This would seem to be a fruitful communication technique.

In both the speed and vehicle messages it was considered that some realistic pictures of what happens to vehicles at different impact speeds may make a more powerful impact. This suggestion requires testing before it is implemented. The same applies to any of the other messages considered for implementation. More work to design suitable graphics and finetune the presentation of the messages would be required, in conjunction with testing, to ensure maximum impact.

It is concluded that Safe System is a useful concept for quickly introducing safety considerations to young drivers. Designing Safe System messages for learner drivers is viable. They are well-received by the target audience and are worth developing further.

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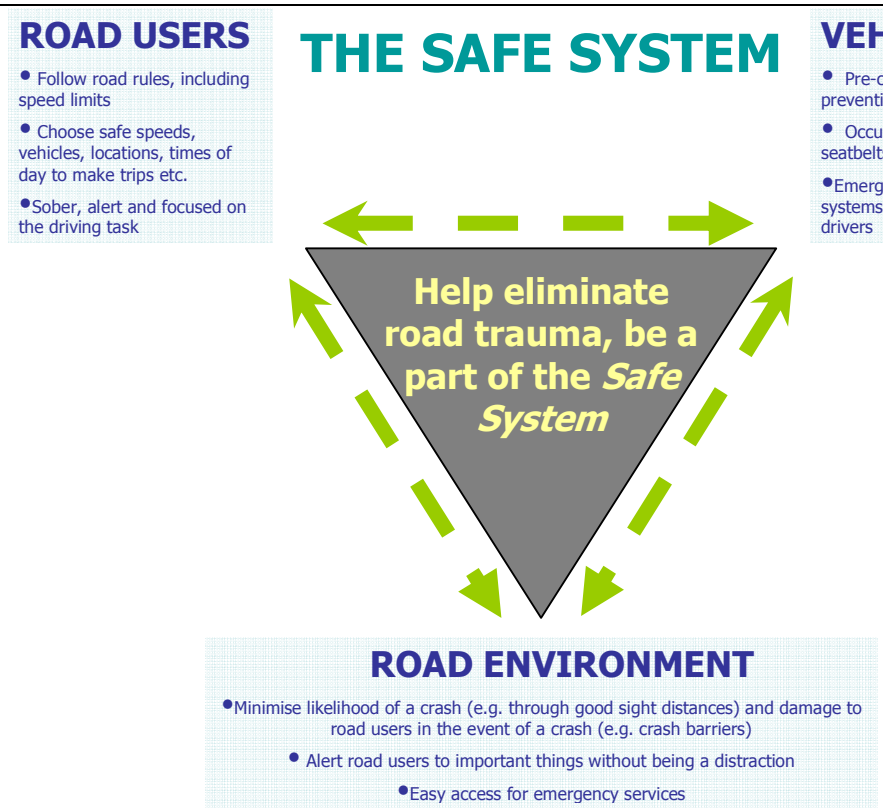
Appendix A – Suggested Safe System messages

A.1 The Safe System

An introductory message intended to be included early in the Handbook.



Every road trauma affects somebody personally. The ACT Government wants to reduce the pain and suffering on our roads. We want to make the road system a Safe System through safer vehicles, safer roads and safer drivers. ACT roads are some of the best designed in Australia and vehicle manufacturers are doing their best to improve vehicle safety. We know drivers occasionally make mistakes and we are making these improvements so that drivers don't pay for mistakes with their lives. However, drivers need to work with the system to experience the safety benefits. These road rules were written to help drivers avoid crashing and to reduce the likelihood of death or life-changing injury in a crash.

A.2 Safe speeds

To be included in sections discussing speed limits and braking distances. May benefit from pictures of the different types of crashes at different speeds, although this idea would need to be tested.

What is a survivable speed?

Speed is the most important factor that you can control in the severity of a crash, even if you are not the driver 'at fault'. It might not feel like you are going very fast, but:

- If you have a side-impact crash with a solid tree, pole or other vehicle at more than 50 km/h, you or your passengers are extremely likely to be seriously injured or killed.
- If you have a head-on crash with another vehicle at 70 km/h or more you are almost certain to be seriously injured or killed.

Pedestrians and cyclists don't have the protection of a vehicle to cushion them in a crash. They rely on you to drive carefully around them. In a Safe System, high-pedestrian use areas have a low speed limit. This is because

- If a pedestrian or cyclist is hit at over 30 km/h they will be seriously injured and may die.

Be very careful around children.

- They don't understand the road rules.
- They aren't very good at choosing a safe time to cross the road.
- They can be impulsive.
- You might be in control of your vehicle, but you can't control what they do. The best you can do is reduce your speed and be very alert, particularly in school zones, at crossings and around parked cars.

A.3 Safe vehicles

Suggested for inclusion in the 'Preparing to Drive' section of Part D – Road Craft of the current *ACT Road Rules Handbook*.

Having a Safe Vehicle is important if you want to be part of the Safe System

In a Safe System, vehicles are designed to protect the people in them as well as other road users like pedestrians and cyclists in an accident.

The NRMA provides easy reference tables for comparing the safety of used cars on their website:

http://www.mynrma.com.au/used_safety_ratings.asp/

You can find new and used car safety ratings on this website:

http://www.howsafeisyourcar.com.au/

Choose the safest car you can afford and keep it well maintained!

A.4 Alert and focused drivers

To be included in Part B – First Steps to safe driving.

True or false?

Being awake for 24 hours has the same effect on your driving ability as having a BAC of .1 (double the legal limit for a fully licensed driver!)

True.

Driving when tired is a silent killer on our roads, both on long and short trips.

People who are often at risk of driving tired include:

- people who work long hours
- shift workers
- people with a heavy study load
- people with busy lifestyles who enjoy staying out very late
- people who don't sleep well (e.g. new parents or people with sleep apnoea)
- people who drive long distances (e.g. on holidays or when working).

The signs of being tired or fatigued are:

- yawning
- eyes feeling sore or heavy
- vision starting to blur
- starting to 'see things'
- daydreaming and not concentrating
- becoming impatient
- feeling hungry or thirsty
- reactions seeming slow
- feeling stiff or cramped
- driving speed creeping up or down or can't keep a constant speed
- starting to make poor gear changes
- wandering over lane lines.

Some of the 'signs' above are very dangerous and you should stop before you are unable to avoid wandering over lane lines or seeing things. The only cure is a good night's sleep, preferably before the journey! If you can't do that, a coffee followed immediately by a 10 or 15 minute powernap will help for about two hours but then you must sleep.

Being part of the Safe System means only driving when you are in full control of your vehicle. Sometimes it is not easy to choose not to drive. You might not have a passenger to take over, your passenger may be just as tired, it might not feel like a safe place to stop, you might have important commitments to meet. In short, you may feel like you have no choice but to drive.

The best thing you can do is allow time in your schedule for a good night's sleep and plenty of rest breaks on long drives. If you find that you have developed a pattern of driving while fatigued, think about how you could improve your routine or whether you have alternative ways of travelling to where you are going.

Appendix B – Summary CVs of expert panel members

Mr Ray Taylor

Profession: Road Safety Research and Consultancy

Years in Industry: 30

Ray Taylor is one of Australia's leading practitioners and authorities in the field of Road Safety. He has tertiary qualifications in Economics and Education. He is currently Senior Associate at ARRB having recently retired as General Manager, Sales & Marketing. In the Senior Associate role Ray's capabilities are made available to ARRB for use in key projects both internationally and domestically on a project by project basis.

Previously at ARRB Transport Research, Ray was General Manager, Research Division, responsible for development and conduct of the full range of business activities undertaken by the Division, including business development, resource allocation and achievement of key business performance indicators.

Prior to his appointment at ARRB, Ray was General Manager of Road Safety in the Roads and Traffic Authority, which is the leading agency for Road Safety in the State of New South Wales, Australia. During this period, new strategies and initiatives included the Local Government Road Safety Program and the Enhanced Enforcement program with the New South Wales Police Service.

Ray has also played a leading role in Road Safety initiatives in the State of Victoria, including establishing the activities of the Transport Accident Commission as its inaugural Director, Accident Prevention resulting in the large-scale Random Breath Testing program, and the first Speed Camera program initiated in Australia.

Prior road safety roles in managing and initiating programs and policy in VicRoads, the road authority in the State, included publicity campaigns targeting drink-driving, and other unsafe behaviour, bicycle helmet wearing, seat belt use and pedestrian safety, together with initiating the State's community road safety program and establishing the road safety program operating in schools.

Dr Peter Cairney

Profession: Principal Research Scientist

Years with ARRB Group: 25

Years in Industry: 25

Peter Cairney has over 25 years experience of research in road safety and traffic matters. His original training was in behavioural science, but he has become familiar with a wide range of traffic engineering and road design issues in the course of his career. He has worked in a number of driver behaviour and road safety areas, including analysis of driver behaviours leading up to accidents, truck safety, railway level crossing safety, pedestrian and cyclist safety, road surface condition and crash occurrence, and community road safety. Road signs and markings have been recurring issues throughout his career, leading to recent work on static road signs for new applications, preparing guidelines for the use of variable message signs, and legibility tests of LCD variable message signs. Current work includes estimating the safety impacts of selected ITS technologies in the Australian road system.

Mr John Catchpole

Profession: Senior Research Scientist

Years with ARRB Group: 18

Years in Industry: 25

John Catchpole joined ARRB Group Ltd (at that time known as the Australian Road Research Board) in 1988. He holds a Bachelor of Science degree with first class honours (in psychology) from Monash University and a Bachelor of Science degree (in mathematics) from the University of Melbourne. In 1997, he was awarded the degree of Master of Applied Science by La Trobe University for his research on accidents involving young drivers.

Prior to joining ARRB Group, he was employed as a Research Assistant in the Psychology Department at Monash University and, before that, as a computer programmer for various commercial and government organisations in Australia and the UK. John is the author or co-author of 35 published and over 100 unpublished research reports and conference papers.

Ms Kelly Imberger

Profession: Senior Research Scientist

Years with ARRB Group: 5

Years in Industry: 13

Kelly Imberger joined ARRB Group Ltd in February 2003. She holds a Bachelor of Science Degree with honours in psychology from Melbourne University and a Graduate Diploma in Road Safety from the University of New England in New South Wales.

Prior to joining ARRB Group, Kelly was employed by VicRoads (the road authority in Victoria) for seven years and worked in both the Road Safety and Registration and Licensing Departments in a number of positions. These roles involved development, management and implementation of projects (and associated policy recommendations) in the areas of learner and novice drivers, motorcycle safety and training, drink drivers, learner permit testing for novice drivers and crash data management.

During her time at ARRB Group, Kelly has managed and been involved in a wide range of projects including those in the areas of fatigue, novice drivers, pedestrians, motorcycles, speed, red light cameras, Road Safety Risk Manager and school road safety education.

Appendix C – Learning to drive in the ACT

Table C.1 illustrates that the model of learning traditionally experienced by the learner driver is a more or less informal apprenticeship. The apprenticeship begins prior to the individual obtaining a learner permit, when they are passengers, pedestrians and cyclists observing the interaction of other people in the road system. They are required to learn some basic rules before being permitted to practice the skills they have observed. Initial practice is then supervised by an experienced driver and the learner gains greater independence as their skill improves until they are granted full independence when they pass their practical driving test or satisfy the requirements of the Competency Based Training and Assessment Scheme.

Table C.1: Process for acquiring a driver licence in the ACT

Stage	Typical age	Pre-requisites	Resources	Real world application
Stage 1: Pre-learner (prior to getting learner permit)	Before age 15 years and 9 months	n/a	*ACT Road Rules Handbook*	Discussing road rules with parents/guardians while they are driving, discussing decisions and describing actions.
Stage 2: Learner driver	From 15 yrs 9 mths to 17 yrs	Complete *Road Ready* course and pass knowledge test	*Road Ready Towards Your Ps in the ACT: A learner driver guide*	Practicing driving with an experienced supervising driver.
Stage 3: Provisional licence holder	At least 17 years	Hold a learner permit for at least 6 months, and successfully complete: 1. The Competency Based Training and Assessment Scheme (CBT&A), which uses a logbook system through an Accredited Driving Instructor; or, 2. A practical driving test with an ACT Government Licence Examiner.		Solo driving with restrictions such as 0.02 BAC. If the provisional licence holder has held a provisional licence for 6 mths and completed a *Road Ready Plus* course they are not required to display 'P Plates' and are entitled to an increased demerit point allowance (8 points).
Stage 4: Full licence holder	At least 20 years	Hold provisional licence for 3 years.		Solo driving

Source: Adapted from the *Road Ready* website, <http://www.roadready.act.gov.au/>

Appendix D – Material presented to expert panel

Part	Page	Short message	Picture	Longer message
A – General Information	1	True or false? Q1. In Australia, more people die every year on our roads than in airplane crashes. Q2. The most common cause of death of young Australians aged 16 to 25 is road trauma. A. Unfortunately, both of these statements are true. Help reduce road trauma, be a part of the Safe System.	Put the short message in a star or some other colourful shape, or flip up flap with answer under lid if possible.	Every road trauma affects somebody personally. The ACT Government wants to reduce the pain and suffering on our roads. We want to make the ACT road system a Safe System through safer vehicles, safer roads and safer drivers. ACT roads are some of the best designed in Australia and vehicle manufacturers are doing their best to improve vehicle safety. We know drivers occasionally make mistakes and we are making these improvements so that drivers don't pay for mistakes with their lives. The road rules were written to help drivers avoid crashing and to reduce the likelihood of death or serious injury in a crash. Please remember the importance of the road rules while you learn about them in this book. Make sure that you ask your supervising driver or driving instructor if you are unsure of something even after you get your driver licence. Research shows that the very best things that you can do to be a safe driver are: 1. Drive at a safe speed. 2. Wear your seatbelt and ensure your passengers wear theirs. 3. Only drive sober. 4. Only drive when you are feeling alert. 5. Choose the safest car you can afford and keep it well maintained.

Part	Page	Short message	Picture	Longer message
B – First steps to safe driving	15	You are 25 times as likely to die or be seriously injured in a crash if you don't wear your seatbelt	Try to get permission from ATSB to use their cartoon of a car falling off a building	Wearing a seatbelt reduces your risk of death or serious injury in a crash by up to 50%. If you don't wear your seatbelt and you are thrown out of the vehicle, you are 25 times as likely to die or be seriously injured than if you were wearing your seatbelt. Think about what that means for your lifestyle (if you manage to survive). What impact that would it have on your family and friends? It's a high price to pay for not buckling up. There are all sorts of myths about seatbelts, but the facts are these. If you are not wearing a seatbelt in a crash, in the time it takes for the vehicle to stop your body will keep moving at the same speed that the vehicle was moving at until it hits something (e.g. the windscreen, a pole, tree, other vehicle or the pavement). A seatbelt holds you to your seat, which acts like a cushion. The belt spreads the impact over a wide area of your body that can take greater force and you get the benefit of the vehicle's crumple zone reducing the impact that you feel. You will still be sore but you are much more likely to live and recover. You might be convinced, but it's quite common to have problems with friends, family and workmates who won't wear their seatbelts. What can you do or say to compel your friend, workmate or family member to wear a seatbelt? Here are some ideas to get you started…. (get ideas from focus group)
B – First steps to safe driving	18	How do you stop someone drink driving?	Picture of "Simone" standing next to the car with her boyfriend gesturing for her to get in	We know there might be times even before you get your licence when you might feel pressured to get in a car with a driver who has drunk too much or who has done drugs. Simone's story is common. "I went to a party and my boyfriend was driving me home. His friends kept giving him drinks and even though he said no because he was driving, they made him feel like a real loser for not drinking. I don't know how many drinks he had, but I felt really worried about getting in the car with him at the end of the night. He told me he was OK to drive and got really offended when I said I didn't want to get in the car with him." This is a very tricky situation. What could Simone say or do in this situation? What else could her boyfriend have said to resist the pressure that he was getting from his friends? Here are some ideas to get you started… (get some ideas from focus groups)

Part	Page	Short message	Picture	Longer message
B – First steps to safe driving		True or false? Being awake for 17 hours has the same effect on your driving ability as having BAC of .05. Being awake for 24 hours has the same effect on your driving ability as having a BAC of .1 (double the legal limit for a fully licensed driver!!!) Both statements are true. People seriously underestimate the effects of driving when tired. At least 25% of crashes are related to fatigue.		Driving when tired is a silent killer on our roads, both on long and short trips. People who are often at risk of driving tired include: people who work long hours; shift workers; people with a heavy study load; people with busy lifestyles who enjoy staying out very late; people who don't sleep well (e.g. new parents or people with sleep apnoea); people who drive long distances (e.g. on holidays or when working). When combined with drugs or alcohol, being tired is lethal. The signs of fatigue are: – yawning – eyes feeling sore or heavy – vision starting to blur – start seeing things – daydreaming and not concentrating – becoming impatient – feeling hungry or thirsty – reactions seem slow – feeling stiff or cramped – driving speed creeps up or down or can't keep a constant speed – starting to make poor gear changes – wandering over lane lines. If you start to experience any of these things, you should take a break or stop driving. The only cure is a good night's sleep, preferably before the journey! If you can't do that, a 10 or 15 minute powernap will help for a short while. Some of these 'signs' are very dangerous and you should stop before you are unable to avoid wandering over lane lines or seeing things. Sometimes it is not easy to choose not to drive. You might not have a passenger to take over, your passenger may be just as tired, it might not feel like a safe place to stop, you might have important commitments to meet. In short, you may feel like you have no choice but to drive. What are some things you can do to avoid driving fatigued? Here are some ideas to get you started… (get ideas from focus groups)

Part	Page	Short message	Picture	Longer message
C – Knowing the road rules		The road rules are your guidelines to driving in the Safe System		These road rules are important because they help you prevent the financial costs and personal pain of a crash. Even if you think you know them perfectly and do all the right things, you should be prepared for other road users who may make a mistake. Be courteous and tolerant and remember that no one deserves to pay for a mistake with his or her life.
D – Road Craft	78	What speed can you survive in an accident?	Speedometer with pedestrian at 30 km/h, pole at 50 km/h and head-on crash at 70 km/h	Speed is the most important factor in the severity of a crash. It might not feel like you are going very fast, but if you hit a pedestrian at over 30 km/h, they are very unlikely to survive. If you have a side-impact crash with a solid tree, pole or other vehicle at more than 50 km/h, you or your passengers will are extremely likely to be seriously injured or killed. If you have a head-on crash with another vehicle at 70 km/h or more you are almost certain to be seriously injured or killed. Serious injury means that you are unlikely to recover within six months. Think about what that might mean for you personally. How will it affect your sports teams, going out with friends, your job or your studies? How will you feel if you are responsible for somebody else being killed or seriously injured?
D – Road Craft	78	How can you resist the 'need to speed'?		We know that once you start to drive on your own there will be situations where you will feel pressured to speed by other people in the car, other vehicles behind you or because you need to get somewhere quickly. Have a think about these situations and how you could resist the pressure without 'losing face'. Here are some ideas to get you started… (get some ideas from focus groups)
E – Other road users		Put yourself in their shoes	Cliff face next to footpath	Pedestrians and cyclists don't have the protection of a vehicle to cushion them in a crash. Research shows that if a pedestrian or cyclist is hit at 60 km/h they will most likely die. That's why you should reduce your speed in areas where pedestrians and cyclists are often present.
E – Other road users		Children are predictable because they are unpredictable	Cartoon of a child's thought bubble and a young car driver	Be very careful around children. They don't understand the road rules, they aren't very good at gap selection and they can be impulsive. You might be in control of your vehicle, but you can't control what they do. The best you can do is reduce your speed and be very alert, particularly at crossings and around parked cars.