

CITATION:

Jepson, J. (2007). Regulation by design; not crisis. In: I.J. Faulks, M. Regan, M. Stevenson, J. Brown, A. Porter & J.D. Irwin (Eds.). Distracted driving. Sydney, NSW: Australasian College of Road Safety. Pages 269-298.

Regulation by design; not crisis

Jill Jepson
Roy Morgan Research Pty Ltd

Introduction

The BBC reported, on 5 December 2003, that US police stopped a driver who was breastfeeding her child while travelling at 100 km/h. Before pulling up, she also managed to phone her husband for advice while taking notes on the steering wheel.

Australian Transport Safety Bureau (2004). Road safety in Australia: A publication commemorating World Health Day 2004. Canberra, ACT: Australian Transport Safety Bureau.

Perhaps the example above is not so strange when we consider that so many things command our attention today—the increasing demands on ‘keeping up’ with activities, the apparent need to optimise time, and the integral role that instant communication now plays in all our lives. Moreover, the accessibility, in terms of availability and cost, of telematic devices (i.e., wireless communications technologies—see footnote), all contribute to a new threat to road safety. In vehicle telematics refers to devices incorporating wireless communications technologies in order to provide information services, vehicle automation and other functions (Transport Canada, 2003). Both in-vehicle and out of vehicle distractions now challenge drivers on a daily basis both on a cognitive and a physical level (Harbluk & Noy, 2002). That these are potential and actual harms on the road is uncontroversial. Further, the fact that drivers give in voluntarily to distraction, as in the example above, suggests that such drivers either:

- are unaware that a lapse in concentration is harmful; or
- believe that in their case they are sufficiently competent to focus their attention elsewhere while driving.

In reality, it is likely that both factors contribute to the behaviour.

If left unchecked, these distractions will ultimately lead drivers to ‘cognitive overload’ whereby driving skills are impaired increasing the number of road collisions.

Effective regulation to deal with these issues must be able to accommodate changing technologies and social behaviour. For example, mobile telephones are no longer the only telematic devices in cars, nor would we want to say that every telematic device is a distraction. Similarly we are now accustomed to send text messages in any circumstance such that we may not always consider or accurately assess the situation.

This paper examines in-vehicle telematic distractions (out of vehicle distractions being beyond the scope of the paper), in terms of the type of harm that they present, assesses the current regulatory controls, and proposes a regulatory scheme to address this area of harm.

Area of harm

The economic cost of road crashes has been estimated by the Bureau of Transport and Regional Economics, using a 'human capital' approach to be in the order of \$15 billion in 1996 – an amount equivalent to Australia's total annual defence budget

Australian Transport Safety Bureau (2004). Road safety in Australia: A publication commemorating World Health Day 2004. Canberra, ACT: Australian Transport Safety Bureau.

Of course economic cost is one facet of the harm; the more important facet is the human cost which is incalculable.

There was a time, not long ago, when driver distractions were limited to essentially those of a non-technological nature, for instance, lighting of a cigarette, consumption of food or drink, or conversing with a passenger. Some researchers argue that these events occurred with such low frequency that they have little impact on the motor vehicle collision statistics (Young, Regan & Hammer, 2003). Certainly, "these are not set to increase" (Transport Canada, 2003) to the extent expected with technology-based distractions.

The proliferation of in-vehicle telematics (Transport Canada, 2003), however, is a potentially problematic cause of car accidents and opens the case for discussion about the need to exert better regulatory control of such devices. As the in-vehicle telematic market has escalated in size and sophistication, the frequency of their use has been commensurate in a technically savvy market such as Australia.

A compounding issue is the recent influx of portable 'plug and play' devices (i.e., generally available add on options such as DVD players and navigation systems).

If we harbour any hope that the Australian appetite for new technology is waning, think again. The charts (Appendix 1,2,3) attached from Roy Morgan Research Pty Ltd illustrate that the desire for new things technology has only just begun.

The concurrent tasks involved in driving (especially in a driving environment of increasing perceptual complexity) and use of in-vehicle distractions is now implicated as a growing source of accidents (Harbluk & Noy, 2002). It is generally accepted by researchers around the world that the use of telematics whilst driving, impairs driving ability and increases the risk of having a collision (Young, Regan & Hammer, 2003). Despite this general consensus among researchers, the relative impairment that occurs from using these devices, as against other distractions, is yet to be quantified with any precision. The empirical task to determine relativity between distractive influences remains difficult due to the wealth of variables that contribute to driving behaviour, the means by which this data is measured and the diverse range of functions within this broad category of devices. For example, research studies reveal that drivers are equally less responsive to road hazards whether using hands free or hand held mobile phones (Griffiths University News Service, 2002). There are a number of studies comparing complex driving tasks against simpler tasks and on road behaviour with drivers in simulators (see, for example, Parkes, & Hooijmeijer, 2000; Williamson, 2003). The results of these studies, raise a grave concern that these devices push the driver into a form of 'cognitive overload' (i.e., the inability to concentrate effectively

on a particular task), leading to a degradation of driving performance through the erosion of situational awareness (Harbluk & Noy, 2002).

Young, Regan and Hammer (2003) in reviewing a range of studies undertaken up to 2003 have identified six broad 'performance variables' that are impaired through distracted driving. These are:

Lateral position	The inability of drivers to maintain centre of the lane position when using mobile phones (hands free and hand held), navigation systems that rely on visual display or manual input of destination information, and adjusting sound systems (i.e. radio or CD players)
Speed maintenance and control	Greater variations in driving speed (mostly at too lower speeds) when using telematics such as mobile phones, navigation systems and CD players
Reaction time to external events	The use of in-vehicle distractions lower and heighten the reaction time to external events. This includes harder braking strategies, faster cornering and greater difficulties in avoiding obstacles (see, e.g., Griffiths University News Service, 2002)
Gap acceptance	The resulting reduced awareness of external events that often leads to drivers accepting shorter gaps in traffic when turning and failing to take account of wet weather conditions and road surfaces.
Subjective workload	The heightened cognitive effort required when driving and performing other tasks at the same time leading to stress.
Attention to safe practices	The reduced time spent on safe driving practices such driving as checking mirrors and instruments.

Anecdotal evidence, for example, media publications and radio broadcasts, also suggests there is a growing public concern about increasing use of distracting devices (particularly mobile phones) while driving. Despite this concern, however, a survey conducted by Griffiths University in 2002, revealed that 30% of drivers text messaged while driving and 48% used hand held phones knowing it to be illegal¹. Another survey conducted by Telstra indicated that "one in six drivers regularly sent text messages while driving"²

The government interest in improving road safety has obvious economic benefit. For the public however, perhaps an overriding concern is the social costs of road accidents and fatalities, especially when it impacts immediate family or friends. For whatever reason, there is a common interest between the wider community and regulatory authorities to take action on road safety and to provide the best possible construct within which the rational actor is at his/her best advantage.

¹ Bob Jennings; Sydney Morning Herald; October 4, 2002
<http://www.smh.com.au/articles/2002/10/03/1033538723965.html>

² Australian Transport Safety Bureau, Road Safety in Australia: A Publication Commemorating World Health Day 2004

Current operative platform

Existing regulatory measures

In a police crackdown on the use of mobile phones by motorists in the Diamond Creek area during June [2004], 54 drivers were caught using mobile phone – including a 17 year old learner driver who was caught sending a text message while she was driving. Her mother was sitting beside her in the passenger seat

Dowling, J. (2004). Police call for text messaging ban in cars. *The Age* (Melbourne), 25 July 2004

Banning of individual devices

Existing regulatory measures controlling in-vehicle use of telematics reflects the piecemeal approach of regulatory control. It is reflective of the ‘tail chasing’ that emerges when regulatory authorities are forced to address high technology industries without having the scope of understanding or foresight. Parallel high technology industries such as the assisted reproduction technologies suffer from similar regulatory dilemmas.

Restrictions on the use of telematics, to date, is limited to a prohibition on using hand-held mobile phones or television and visual display units that are visible to the driver or distracting to another driver while operating a motor vehicle³. The regulations are, in general terms, prescriptive in nature reflecting a deterrence model which involves prosecution and punishment.⁴

This prescriptive approach suffers from the following weaknesses:

- i. Government failure to take account of its own policy of ‘best practice’.

In its Principles of Good Regulation, the Victorian government clearly stipulates that:

Particular care should be taken to ensure that objective [of any regulatory reform proposal] is defined broadly and is not confused with the strategy for its achievement; for example, a reduction in road fatalities is an objective,⁵ whereas compulsory wearing of seatbelts is one strategy for achieving this objective⁵.

By only banning the use of hand-held mobile phones while driving, the Victorian government has failed to recognise the emergence of an entire industry of telematic devices. Mobile phones are just one of a host of in-vehicle telematics now available to drivers. Indeed there is an increasing trend not only to use the in-vehicle products but also to use portable devices such as palm tops, navigation equipment, DVD players and the like.

³ *Australian Road Rules* S299 & 300; adopted in Victoria through the *Road Safety (Road Rules) Regulations* 1999 (Victoria Government Gazette No p2, 28 October, 1999)

⁴ Parker, C., ‘Reinventing Regulation within the Corporation: Compliance-Oriented Regulatory Innovation’, *Administration and Society*, 2000:32:5:529-565

⁵ Office of Regulation Reform, *Principles of Good Regulation*, State Government of Victoria (undated).

ii. Failure to establish a benchmark for unacceptable distractive devices

There are gaps in research literature when it comes to understanding the relativity of the distraction of one telematic device when compared with another. For example the level of distraction that hand held mobile phones have compared to hands free systems. Without that information it is difficult to determine an

appropriate base line measure against which to compare driving performance when interacting with various devices⁶.

Surely then, if the government persists with prescriptive legislation, the imposition of a zero tolerance should be based on a class of products rather than individual products until such time that each product can be empirically graded?

iii. Failure to modify driver behaviour

While a 1998 WA survey indicated that 82% of respondents understood that mobile phone use while driving increases the likelihood of a crash⁷, we still see that in Australia one in six drivers admit to sending text messages while driving and around 33% of drivers admit to regularly using hand held mobile phones while driving⁸. Further studies revealed that in Melbourne over 2% of drivers were counted using their hand held mobile phones whilst driving⁹. It has to be questioned whether such prescriptive regulations are effective in changing driver behaviour.

iv. Dependent on effective enforcement

Being a prescriptive tool the success of outlawing the use of mobile phones and televisions is greatly reliant on the enforcement capabilities of the police. As Friedland states¹⁰

Publicity can help produce exaggerated perceptions of the likelihood of apprehension and punishment, but the effects of these perceptions on behaviour are likely to erode as drivers learn, through experience, that the likelihood of apprehension remains low

Enforcement is difficult and raises particular issues. Firstly, mobile phone use is difficult to prove, a cupped hand to the ear cannot be constituted as mobile phone use. Secondly, it is questionable whether police need to be diverted from other demanding roles to enforce mobile phone use.

v. Does not address occupational pressures

A 1991 study by Mcknight and Mcknight¹¹ indicated that 72% of mobile phone calls are business related. Although this study was conducted over thirteen years ago,

⁶ Young, K., Regan, M., and Hammer, M., 'Driver Distraction: A Review of the Literature'; *Monash University Accident Research Centre*, Nov 2003 Report Number 206.

⁷ www.officeofroadsafety.wa.gov.au/facts/mobile.pdf, August 2004

⁸ 'Telstra, Police and NRMA Insurance join forces to target mobile phone use on Australian roads' *Telstra News Release*, August 2004, www.telstra.com.au/newsroom.

⁹ Taylor, D., Bennett, D. M., Carter, M., and Garewal, D., 'Mobile Telephone Use Among Melbourne Drivers: A Preventable Exposure to Injury Risk', *Medical Journal of Australia*, 2003; 179(3):140-142

¹⁰ Friedland, M., Trebilcock, M., & Roach, 'Regulating Traffic Safety' in Friedland, M.L. (ed) *Securing Compliance: Seven Case Studies*, Toronto, University of Toronto Press, 1990, 239-241;

¹¹ see reference to 1991 study by McKnight and McKnight by Harlow, J., and Noy, Y., 'The Impact of Cognitive Distraction on Driver Visual Behavior and Vehicle Control', *Transport Canada: Road Safety Directorate and Motor Vehicle Regulation Directorate*, February 2002: TP 13889 E

anecdotal evidence suggests that there would not be much change in this statistic. The technological revolution has created a society which now demands 'time optimisation'. The portable office has blossomed in urban traffic jams where the temptation to utilise the idle time is now seen as a necessity. This demand on workers is not going to be tempered unless regulatory intervention, from an employer's and employee's perspective, can successfully alter driver habits.

- vi. Fosters the perception that other telematics are safe or acceptable

This law has a potential counter-productive consequence of creating a public perception that whilst mobile phones may be a driving hazard other in vehicle telematics such as hands free phone kits are safe. We now know however that hands free kits are just as hazardous to the driving task as hand held mobile phones¹².

Broader Regulatory Restrictions

Under the existing regime, telematic use that is not covered by the specific offences outlined above, can only be an offence if it falls within the provisions summarised in the table below¹³;

Offence	Act	Elements	Penalty
Culpable driving causing death	s.318 <i>Crimes Act</i> 1958	Person kills another person by driving a motor vehicle: (a) recklessly, or (b) grossly negligent, or (c) while under the influence of alcohol or a drug to such an extent as to be incapable of having proper control of the motor vehicle	Maximum of 20 years prison or \$240,000 or both Licence cancellation and disqualification for minimum of 2 years
Dangerous driving	s.64 <i>Road Safety Act</i> 1986	Person drives a motor vehicle at a speed or in a manner which is dangerous to the public, having regard to all the circumstances of the case.	Maximum of 2 years prison or \$24,000 fine or both. Licence cancellation and disqualification for minimum of 6 months
Careless Driving	s.65 <i>Road Safety Act</i> 1986	Person drives a motor vehicle carelessly	First offence is 12 penalty units. Subsequent offence 25 penalty units

The first two provisions sanction drivers in the most serious of circumstances; that is upon the death of a person. The final provision is for the less serious offence of careless driving.

¹² News in Science., 'Mobile phone link to accidents'. Tuesday, 29 May 2001., http://www.abc.net.au/science/news/health/Healthrepublic_303714.htm

¹³ Department of Justice; 'Culpable and Dangerous Driving Laws; Discussion Paper'; January 2004 with additional reference to the *Road Safety Act* 1986 and the *Crimes Act* 1958

Careless driving is a summary offence which in 1998/1999 ranked 5th in the most common offences appearing in the Magistrates Court, behind theft, obtaining property by deception, being drunk in a public place and possession of drugs¹⁴. Even though 5th, careless driving only represented 2.6% of offences in the Magistrates Court that year indicating that there is either little careless driving in the community or enforcement is difficult.

The punitive sanction of penalty units does not reflect consistency with the government's philosophy on road safety. For example where a driver has been charged with a blood alcohol content over 0.05 or failing to undergo a breath test the police have the discretion to suspend the person's driver's licence until the matter has been determined. Although in practice this law is not 100% effective i.e. over 10,000 people were charged with driving with a BAC exceeding 0.05% in 2002¹⁵; drivers clearly understand the relationship between the right to drive and drink driving. This approach should be mirrored in the careless driving charge.

3.2 Non Regulatory Alternatives

Dissemination of information, either as printed literature or in electronic format is readily available from a range of peak bodies (such as the Royal Automobile Chamber of Commerce of Victoria) and governmental agencies (Transport Accident Commission and the Australian Transport Safety Bureau). Whether this information reaches the targeted group is questionable.

Advertising, as a means of driver education, whilst effective in the short term, is expensive. Additionally these campaigns deal with specific strategies such as drink driving or driving when fatigued rather than addressing broader issues of safe driving with in-vehicle telematics.

4. A Regulatory Model

4.1 An overview

The issues discussed in the previous sections of this paper emphasise the essential need to develop an innovative reform strategy which capitalises on modifying driver behaviour.

For the model to be successful it must satisfy the following criteria;

- A key premise to the design of this regulatory reform is that it is in keeping with the Office of Regulatory Reforms' edict,

The current trend, which is reflected in Victorian Government Policy, is a preference for performance based regulations which are expressed as functional or performance objectives¹⁶

- Following from this point is that the model should not be complex, as complexity often invites avoidance, as in the case of the Income Tax Assessment Act.

¹⁴ Department of Justice; 'Statistics of the Magistrates Court of Victoria 1998/1999', ISBN 073062457-9

¹⁵ id

¹⁶ Office of Regulation Reform, *Principles of Good Regulation*; State Government of Victoria (undated)

- The model ought to be designed with compliance considerations at the forefront¹⁷ that uses a combination of co-operation, persuasion and education. Such an approach capitalises on the belief that ‘actors’ are more likely to comply with fair rules in exercising trust and that “trust engenders trustworthiness”¹⁸. An additional ‘ingredient’ in this model mix is the need to harness technology for the betterment of road safety. A good example of a regulatory model that has incorporated many of these attributes is The Australian Taxation Office which has successfully piggy backed the Electronic Lodgement System with the introduction of a self compliance system.
- As discussed by Andrew Leigh¹⁹, governments have the responsibility to shift from short term goals to focus policy making to anticipate future challenges in order to foster “holistic governance”. With care, regulatory authorities can develop a program of strategies which capture immediate outcomes while also taking into account emerging issues which have a more long term effect by drawing on a broad range of information sources. Leigh argues that this “strategic foresight” will give rise to innovative government outcomes which cast a wider net than the range of issues being immediately addressed.
- The model should recognise that outlawing a technology is not necessarily appropriate because technology may have beneficial uses. For example development of voice activated navigation systems reduces physical distraction of inputting the destination. At this early stage in the lifecycle of telematics, regulatory authorities should seize the potential to shape telematic design and use for the future to meet its safety standards.
- In developing a model it is important not to constrain individual behaviour to an unacceptable degree, with a set of prescriptive rules outlawing any distractive inclusion in a motor vehicle²⁰. Modern regulatory theory proposes that individuals be encouraged to exercise discretion. Such discretion evolves through education and trust of drivers decision making abilities. Indeed there is now a prevailing school of thought that;

Drivers must assume responsibility for the safe control of the vehicle, including appropriate use of telematic devices²¹
- It can be argued that the perception of deterrents is an important aspect of enforcement, not the deterrent itself. If this is true then, deterrents need to be consistent with the offending behaviour and publicly communicated.

The strategy of reform proposed in this paper is a hybrid of a number of regulatory and non-regulatory alternatives which have taken into consideration, feasibility, community acceptance, enforceability and equity²² designed to lever modifying behaviour.

¹⁷ Parker, C., ‘Reinventing Regulation within the Corporation: Compliance-Oriented Regulatory Innovation’, *Administration and Society*, 2000:32:5:529-565.

¹⁸ Braithwaite, J. and Makkai, T., ‘Trust and Compliance’, *Policing and Society* 1994:4:1-12.

¹⁹ Leigh, A., ‘Thinking Ahead: Strategic Foresight and Government’, *Australian Journal of Public Administration*; 62(2):3-10, June 2003.

²⁰ The conclusions of several research studies recommended that drivers should not engage in any mobile phone use while driving. Refer to Young, K., Regan, M., and Hammer, M., ‘Driver Distraction: A Review of the Literature’; *Monash University Accident Research Centre*, Nov 2003 Report Number 206.

²¹ Transport Canada: Road Safety and Motor Vehicle Regulations Directorate, ‘Strategies for Reducing Driver Distraction from In-Vehicle Telematics Devices: A Discussion Document’, April 2003: TP 14133 E

²² Office of Regulation Reform, *Regulatory Alternatives*, State Government of Victoria (undated)

4.2 Regulatory Space

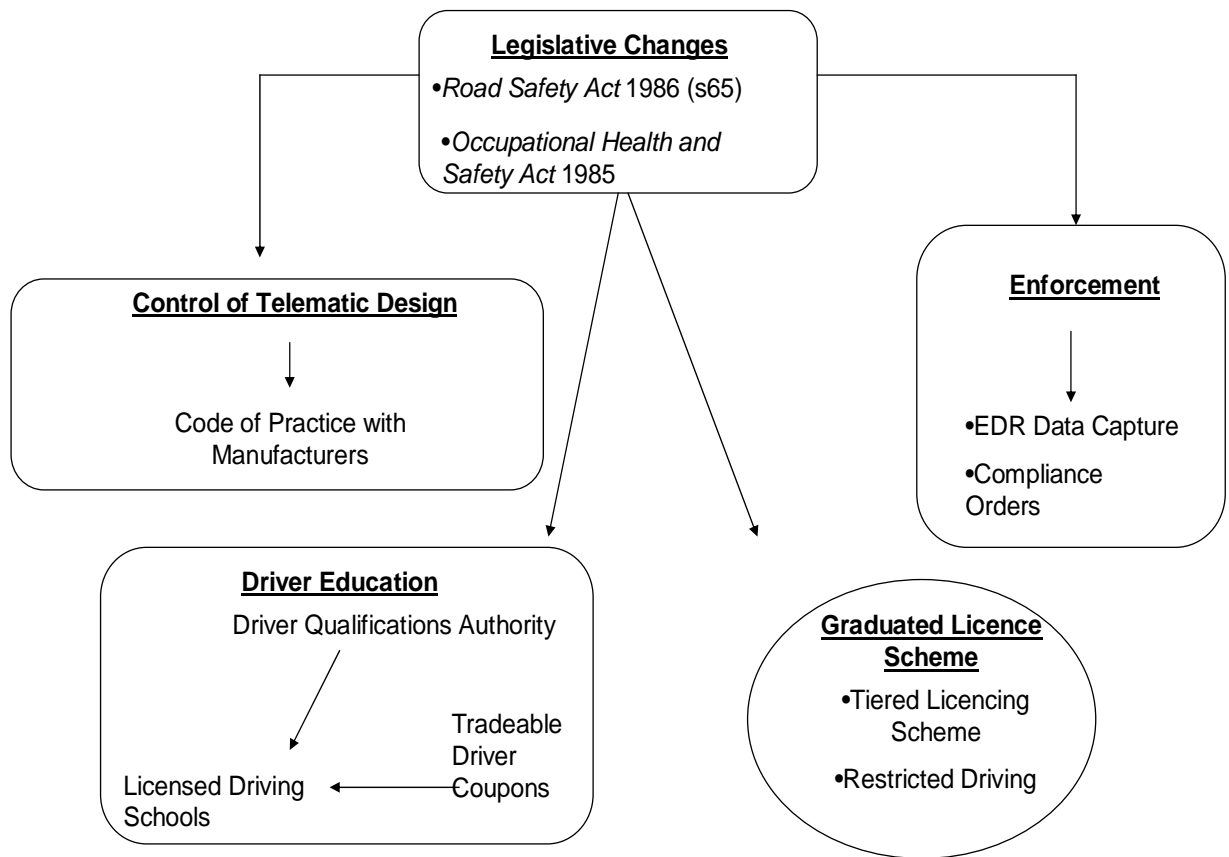
The table below summarises behaviour that contributes to the problem of unsafe driving across the range of actors in the Regulatory Space, and outlines how the harm can be controlled.

Actors	Area of Harm	Area of Control
Driving Public	<ul style="list-style-type: none"> Over confidence; lack of knowledge; social and work pressures to use telematics while driving 	<ul style="list-style-type: none"> Education, Legislative Reform to make drivers more responsible for their actions
Driving Schools	<ul style="list-style-type: none"> Questionable whether defensive driving courses are producing over confidence on the road generating counter productive risks 	<ul style="list-style-type: none"> Research on courses which benefit driver safety. Licence Driving Schools which undertake to conduct appropriate courses
Manufacturers: Motor Vehicle and telematic devices	<ul style="list-style-type: none"> Designs are not sympathetic to safe driving practices 	<ul style="list-style-type: none"> Establish a Code of Practice for design of telematic devices Enforced liability for non compliance
Employers/Employees & Unions	<ul style="list-style-type: none"> Many work related demands on the driver; little responsibility of employer Union interest in safety of worker 	<ul style="list-style-type: none"> Expanded OH&S provisions to promote employer responsibility to the employee.
Peak Bodies	<ul style="list-style-type: none"> Exert little influence or enforceable control over driving behaviour 	<ul style="list-style-type: none"> Lobby group to influence private sector market i.e. insurance companies Powerful information dissemination capabilities
Motor Vehicle Dealers	<ul style="list-style-type: none"> Little interest in safety of driver 	<ul style="list-style-type: none"> Liability to sell only vehicles manufactured under code
Regulatory Authorities	<ul style="list-style-type: none"> Piecemeal approach ignoring global environment and its implications. Ineffective enforcement capabilities 	<ul style="list-style-type: none"> More tools available for enforcement. Shift responsibility to drivers and third parties

From the analysis in the table above, we can conclude that there are inherent limitations in controlling road safety without an effective change in attitude of a broad range of interest groups.

To address this complexity, let me present to you a reform package as an example regulatory model. As indicated in the attached diagram the model has been designed to cover five areas; Legislative Reform, Driver Education, Control of Telematic Design, Enforcement and Graduated Licence Program.

Figure 1: Reform Model



4.3 Legislative Changes

There is evidence that both technology based and non technology based distractions can have a detrimental effect on driving performance
 Driver Distraction: A review of the Literature

Figure one above illustrates the proposed reform measures designed to address the area of harm in consideration of the points discussed previously in this paper.

It should be noted that prior to implementation of any part of this model consideration must be given to National Competition Policy (through the Regulatory Impact Statement)²³ to ensure that its implication does not adversely affect the market.

As a first measure there are two changes, set out below, to the existing legislative regime. These changes act to “extend the coverage of the principal legislation²⁴” as these existing

²³ Office of Regulation Reform, ‘Regulatory Impact Statement Handbook, (undated) State Government of Victoria

²⁴ Office of Regulation Reform, ‘Regulatory Alternatives’ (undated), State Government of Victoria

laws are both well understood by the public (if not specifically they are understood in concept) and are consistent in nature with the existing legislation.

Road Traffic Regulations

Amended Legislation

Existing legislation in respect to careless driving (*S65 Road Safety Act 1986*) is very broad in its scope. Indeed it appears so broad that;

It's hard to explain this offence, because it is used by police in a wide variety of situations. In general it means that you have not driven in the way that the reasonable and prudent driver would.²⁵

There have been moves overseas to amend such legislation, with emphasis on 'plain' English, which can be better understood by drivers. Two examples that reflect this approach are, the Swiss traffic regulations:

The driver must concentrate on the road and the traffic while driving. He or she may not carry out activities while driving which negatively impact the operation of the vehicle²⁶

Or alternatively Section 8 the New Zealand *Land Transport Act 1998*;

a person may not operate a vehicle on a road carelessly or without reasonable consideration for other persons using the road.

It is proposed that s65 of the *Road Safety Act 1986* be amended to achieve a similar outcome.

Of course, such performance based legislation will not be without its troubles. Uncertainty will exist about interpretation and acceptable compliance. It is expected however that the activities of the Drivers Qualifications Authority (through public education, as detailed in section 4.4 below) will ensure that there is a high level of understanding of the problems associated with distracted driving.

Penalties

A further question to address in respect to s65 of the *Road Safety Act 1986* (Vic) is the penalties attached to the offence.

Rowan Robinson and Braithwaite argue there are more effective means of securing compliance than criminal prosecution²⁷. Currently, however the Courts are limited in the range of punishment that they can impose on drivers charged either under the *Crimes Act 1958* (Vic) or *Road Safety Act 1986* (Vic) as table one indicates. To support Governments desire to modify driving behaviour it is proposed that the courts, further to the punitive sanctions currently available, are given the discretion;

- To impose compliance orders as part of the prosecution process, wherein no criminal offence occurs if the compliance orders are met and;

²⁵ Law for You; 'Fact Sheet; Driving Offences'; <http://www.law4u.com.au>; 11/09/04

²⁶ National Highway Traffic Safety Administration., 'An investigation of the safety implications of wireless communications in Vehicles'; 1997, <http://www.nhsta.dot.gov/people/injury/research/wireless>

²⁷ Rowan-Robinson, J., Watchman, P., & Barker, C., 'The place of criminal law in practice'; *Crime and regulation: A study of the Enforcement of Regulatory Codes*, Edinburgh, T&T Clarke, 1990

- To suspend a person's licence when they have been charged with an offence until the matter has been finalised or the compliance order is fulfilled. (It is understood that this discretion conflicts with the basic principal of criminal law, and is partially address in section 4.6 of this paper)

Compliance orders issued by the courts would mandate the offending party to attend a prescribed driver training course designed to address the behavioural problem.

Occupational Health and Safety Regulations

There is little doubt that Occupational Health and Safety Law has made great inroads in establishing safe work practices and reducing the level of injury in Australia. Take for example the reported statistics below²⁸:

Issue	Year of Reporting	Statistic
New Number of compensated cases reported	1996/1997	163,700
	2000/2001	142,700
Frequency rate of new compensated cases reported	1996/1997	13.2 per million hours worked
	2000/2001	10.5 per million hours worked

There is a compelling argument that employers should accept a degree of responsibility for the activities of their employees in respect to use of telematic devices as it relates to employment. This argument arises from two sources. Firstly the fact that telematic devices have a significant distractive effect on driving behaviour²⁹ and secondly from the research review there is an indication that a high proportion of mobile phone use (72%) is work related³⁰.

It is proposed therefore, that the *Occupational Health and Safety Act 1985 (Vic)* be extended to include vicarious liability of employers and principles in relation to safe driving practices. Similar to s18 of the *Racial and Religious Tolerance Act 2001 (Vic)*, in order to avoid vicarious liability in relation to road safety, the employer must prove;

On the balance of probabilities, that the employer or principal took reasonable precautions to prevent the employee or agent contravening this part

To ensure exception to vicarious liability it is envisaged that these precautions would include such things as;

- Exert influence over the purchase and installing of 'well' designed telematic devices that comply with generally accepted standards (thereby exerting a level of environmental control over the type and acceptability of devices being designed and offered for sale)

²⁸ National Occupational Health and Safety Commission; *Compendium of Workers' Compensation Statistics, Aust, 2000-2001*; Dec 2002 ISBN 1920763058

²⁹ Young, K., Regan, M., and Hammer, M., 'Driver Distraction: A Review of the Literature'; *Monash University Accident Research Centre*, Nov 2003 Report Number 206

³⁰ Harbluk, J., and Noy, Y., 'The Impact of Cognitive Distraction on Driver Visual Behavior and Vehicle Control', *Transport Canada: Road Safety Directorate and Motor Vehicle Regulation Directorate*, February 2002: TP 13889 E

- Encouraging or enforcing attendance at (using the tradeable coupon system), or conduct in house training on efficient and effective use of telematics
- Establishing a code of conduct in regard to the frequency and type of communication between employer and employee with a focus on the level of complexity of conversation.
- Create awareness of Electronic Data Recorders (as discussed in the enforcement section below) and their use in validating driver behaviour.

4.4 Driver Education

“if it appears that the public has a distorted view of the risk or they are ignorant of the consequences of the risk, then an educational programme may be the best option”

Office of Regulation Reform, *Alternatives to Regulation.*, State Government of Victoria (undated)

While there is little doubt that technology has made great inroads to ameliorate road safety, it is also evident that controlling driver behaviour has a significant role to play in future traffic safety programs³¹. Education is important in promoting good driving practice - not only for the learner driver, but also reinforcing driver education throughout the driver's life. The scheme described below addresses these issues.

i. Drivers Qualifications Authority ('DQA')

It is proposed that a “Driver Qualifications Authority” be established with the prime aim to oversee, monitor and disseminate effective driver education. The Authority will act as an oversight body, under the auspices of VicRoads³² and will have representatives on the board from key actors in the regulatory space; peak bodies for example, RACV, Austroads, VACC, research professionals such as Monash University Accident Research Centre, industry professionals such as insurance companies and manufacturers, and finally government representatives from bodies such as the TAC and VicRoads.

The DQA would have the power to;

- Licence approved driving schools (similar to the accreditation process of Drink Driving Education Programs) - renewable on a 3 yearly basis;
- Develop (through a subcommittee) an approved scheme of education programs aimed at satisfying education research outcomes and focus on driver safety with particular attention focused on high risk groups such as young males etc. This would include the

³¹ Friedland, M., Trebilcock, M., & Roach, Regulating Traffic Safety in Friedland, M.L., (ed) *Securing Compliance: Seven Case Studies*, Toronto, University of Toronto Press, 1990, & Australian Transport Safety Bureau, *Road Safety in Australia: A Publication Commemorating World Health Day 2004* and Senserrick, T.M.; Training ‘Young drivers:Can it work?’, *Proceedings of the Developing Safer Drivers and Riders Conference*, 21-23 July 2002, Parliamentary Annex, Brisbane

³² As part of its responsibility of “Developing and implementing road safety strategies and promoting road accident prevention practices in the community” a quote from Vicroads ‘Who are we’ http://www.vicroads/about_vicroads; 05/09/04

development of an approved curriculum for all courses, outlining topics and assessment criterion;

- Oversee and approve all complementary education programs such as advertising, promotional literature and publications issued by the Government and associated bodies, to ensure consistency and effectiveness in approach;
- Monitor and evaluate the driving schools to ensure that the courses are conducted pursuant to the program prescription through an audit process;
- Revoke the licence of an approved driving school when, after due process, it is determined that the school does not satisfy the aims of the DQA education program;
- Collect, collate and analyse statistics from data available from enforcement strategies detailed further in this paper, with the sole aim to evaluate and improve driver education programs;
- Driving Schools must be effectively controlled by licenced³³ driving instructors;

ii. Tradeable Driver Coupon (“TDC”)

The success of an education campaign is threatened when the target groups are difficult to locate and education becomes an expensive process.³⁴

To overcome this problem and encourage drivers to participate in driver education programs, a mandatory levy of, say, \$100³⁵ is to be added to the cost of registering a new, or transferring a second hand car. The levy is paid to the DQA who issues the car owner a coupon known as a Tradeable Driver Coupon (“TDC”), a prepaid right to attend a ‘safe driving’ education program. The coupon is exercisable at any accredited driving school, their fees being redeemable from the DQA. The coupons are tradeable and transferable so as to encourage the highest conversion rate possible. An added incentive for the driver to undertake the course may be reflected in motor vehicle insurance discounts and learner driver incentives, as discussed in a further section.

Coupons are issued solely by the DQA rather than through dealers so as to include private sales (those other than through registered motor vehicle dealers) of motor vehicles. This approach will ensure efficient and equitable distribution of coupons, with the potential to reach the high risk target groups of drivers under 25 who may be more inclined to buy second hand cars. The handling the coupons through a central agency will also reduce the incidence of profiteering by dealers i.e. retaining the coupons and selling them independently.

iii. Licenced Driving Schools

The DQA has the authority to licence driving schools that are prepared to commit to a Code of Practice and undertake to conduct the prescriptive education courses as developed by the DQA. To ensure equity in the scheme, added financial incentives may be given to

³³ s33 *Road Safety (Driving Instructors) Act* 1998.

³⁴ Office of Regulation Reform; *Alternatives to Regulations*, State Government of Victoria (undated).

³⁵ This figure is derived from the average cost of 4 ‘advanced driver’ courses sampled by telephone enquiry.

promote course in other languages than English, in regional locations, and on weekends to ensure accessibility to the differing needs of the community.

The entities entitled to be licensed by the DQA will not be limited to existing driving schools. It is envisaged that car manufacturers may consider becoming licensed driving schools. This is of particular interest to the DQA which would encourage manufacturers to expand the prescribed courses with in-vehicle telematic education. Not only would this build on brand loyalty but would also complement the need for drivers to be familiar with their own in vehicle telematic devices.

Driving Schools will have a renewable licence (say every three years) and would be subject to audit by the regulatory authority

iv. Licenced Driving Instructors

Pursuant to s33 of the *Road Safety (Driving Instructors) Act 1998*, the Department of Infrastructure

Prior to granting a licence can require driving instructors to pass a training course approved by the authority.

Similar to the control of tax agents and now auditors³⁶, this provision enables the DQA to exert influence on the standard of driving instruction within the community as a conduit to the driving public. It may be deemed appropriate to have a system of gradated licences, which provides for a range of technical competencies to satisfy differing demands. For example, a licenced instructor teaching learner drivers on a one to one basis may have less training requirements than a licenced instructor having effective control of a driving school.

v. DQA Funding

Of course, no regulatory model can be properly assessed without an evaluation of the net cost of the project relative to the benefit to the community at large. It is difficult, in this case, to prepare a Cost Benefit Analysis, as there is a large degree of uncertainty with respect to the 'future' benefit derived from the proposed regulatory reform, because, in the end, the result would need to be viewed in light of the proposed reduction in road trauma costs³⁷. As an alternative measure, a break even analysis can be used. This would determine the minimum dollar revenue required for the strategy to break even.

A detailed analysis of this proposal is beyond the scope of this paper. It would be, however, an integral part of a Regulatory Impact Statement. Despite this, several points are worth noting;

- It is assumed that there would be less than 100% redemption in coupons;
- Similar to the Commonwealth Medicare Scheme, the Victorian Government would negotiate a ceiling on each redeemed coupon of say \$80 per coupon leaving a residual surplus of \$20, leaving a net surplus of funds;

³⁶ under the *Corporate Law Economic Reform Program (Audit Reform and Corporate Disclosure) Act 2004* provisions.

³⁷ Office of Regulation Reform., *Regulatory Impact Statement Handbook*; (undated)

- Any remaining funds (net of administration costs), or additional government injection of funds, would be directed prudently towards on-going research on safe driving education, and towards targeting high risk, or disadvantaged groups with the offer of complimentary coupons.

It is envisaged that this proposed regulatory reform would be financially self sustaining offering the government a range of political and economic benefits. In a climate where 'user pay' levies are on the increase, (for example toll roads, water usage) we must be mindful, however, of the community's tolerance for additional levies.

vi. Other issues

In accepting the above strategies, we must recognise that there are continuing and unresolved issues in relation to the effectiveness of driver education. The core of the problem is, when and how, to effectively disseminate information on driver safety. We know for example, that recent studies indicate that 'advertising' and literature, in the form of pamphlets etc, have little longitudinal effect as the community becomes desensitised to the message (Office of Regulatory Reform, undated). We also now understand that, 'Advance Driving Skills' courses appear to have counterproductive results to the extent that they are linked to building unrealistic confidence in driving behaviour (T.M. Senserrick, Personal correspondence, Tuesday 17 August 2004). Ann Williamson points out in her literature review, there has been little work done and research undertaken to evaluate the effectiveness of formal driving courses and indicates the need for further research to clearly identify course composition designed to heighten driver safety (Williamson, 1999).

Control of telematic design

According to Parker (2000), voluntary agreements are being widely used to avoid the need for restrictive regulation and legislation. In an area of high technology, and where 'open architecture' of device design is becoming a major safety issue (Transport Canada, 2003), such tools offer flexibility to be responsive to demands of the community and regulatory bodies in an environment of rapid change, without becoming overtly prescriptive.

It is proposed that a Code of Practice be negotiated between a representative body of the DQA and manufacturers (including those importing into Australia) primarily to control telematic device design and use. Access to international agreements and publications such as the Japan Automobile Manufacturers Association's (2000) 'Guideline for In-Vehicle Display Systems', and guidelines developed in the United Kingdom (British Standards Institution, 1996) and the United States of America (Driver Focus - Telematics Working Group, 2002) are useful points of reference and may provide a platform from which to commence the development of the Code of Practice.

As evidence suggests that there has been little inducement for designers and engineers to understand the 'needs, capabilities and limitations' fundamental to driver system integration (National Highway Traffic Safety Administration, 1997). The consultative mechanism of the Code of Practice between representatives of the DQA and manufacturers is intended to address this problem. The Code of Practice will shape product development and design towards devices that have met the approval of the industry experts, international standards (such as ISO 13407; Human Centred Design for Interactive Systems) and customer demands. In participating in the Code of Practice, Manufacturers will formally acknowledge

their duty of care in producing 'road safe' products. It is envisaged that the Code of Practice would address specific issues such as

- telematics system integration within the vehicle;
- multifunctional interfaces;
- configurable interfaces and;
- open architectures (National Highway Traffic Safety Administration, 1997).

The failure to meet with the Code of Practice specifications would lead to either, exposure to negligence claims by members of the public, or the threat from Government of other regulatory options which may be more restrictive.

Enforcement

As discussed previously, problems exist in the enforcement of offending driving behaviour. The practical enforcement capabilities of police are not only limited to number and the priorities of police in any one day but also the difficulties in validating the behaviour in court. In an area of huge technological advancements the Government should rely on technology to assist them (as with the Australian Taxation Office Electronic Lodgement System) in improving the enforcement mechanisms. Such an example is electronic data recorders.

Electronic data recorders

Electronic data recorders (EDR) collect vehicle and occupant crash information. The amount of data collected by electronic data recorders may be simple or may collect a host of other variables such as braking patterns, seat belt use, speed data, the status of telematic devices and other pre crash dynamics. A working committee funded by the National Highway Traffic Safety Administration in the United States studied electronic data recorders with regard to their use in 'crashworthiness' data. The committee concluded that, amongst other things, the use of electronic data recorder information could greatly assist accident reconstructions – indeed an electronic data recorder was recently used by a court in Florida (USA) to validate the speed of a drunk driver (Oldenburg, 2003). Privacy issues aside, electronic data recorders can make an empirical contribution to the analysis of causes of collisions for a range of customers, such as manufacturers, insurers, enforcers, medical practitioners, vehicle owners and government authorities. Importantly, electronic data recorders are able to help researchers identify some driving patterns that were otherwise unaccountable. The scope of their use therefore is very diverse, and moves beyond the scope of this paper. As the development of electronic data recorders accelerate, regulatory authorities have the potential to direct their design and use in a controlled and informed manner.

As they relate to this paper, electronic data recorders have the potential to:

- Assist enforcement of preferred driving behaviour without increasing enforcement complexity and cost. (This can be achieved by police having the drivers authority, or court orders to read electronic data recorder data to validate driving patterns).
- Create a perception of enforcement. This point is best illustrated by some studies of European vehicle fleets which found;

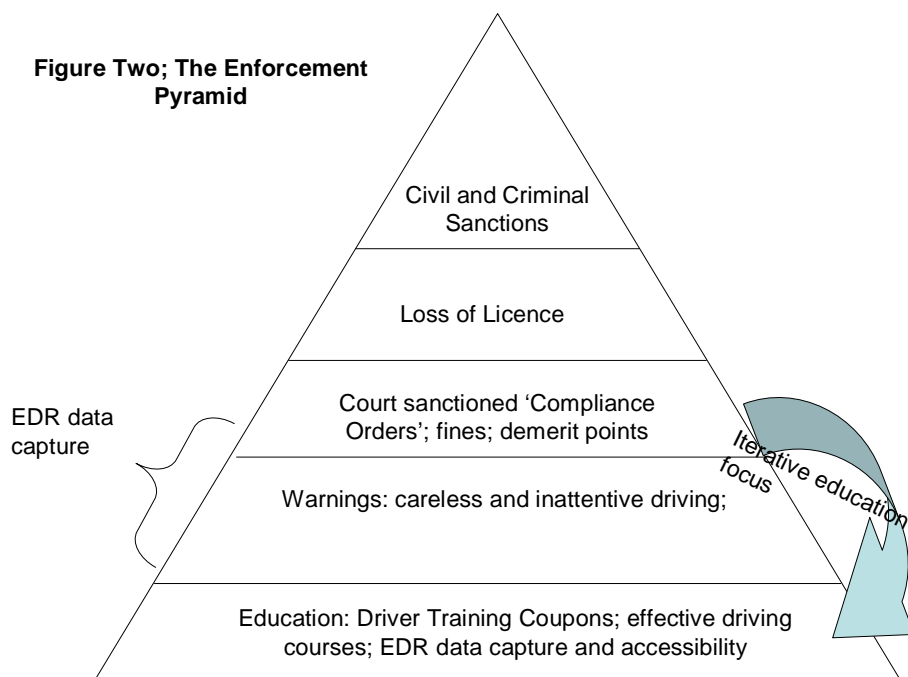
that the driver and employee awareness of an on board EDR reduced the number of crashes by 20-30 percent, lowered the severity of crashes, and decrease the associated costs (National Highway Traffic Safety Administration, 2002)

It is recommended that a working committee be established to determine, with a view for the permanent deployment of electronic data recorders:

- The advancement of electronic data recorder technology and its usage;
- The best method of data collection and retrieval systems (in relation to uniform electronic data recorder technology across the manufacturing spectrum);
- How to overcome the privacy and legal issues that are enormously sensitive areas of concern to the public. These issues would cover data ownership, access rights and acceptable use within a defined context;
- The contribution that electronic data recorder information can make better understanding driver behaviour.

Enforcement model

A brief look at Braithwaite's enforcement model from the perspective of the driver, helps illustrate the application of the above provisions. Assuming the rational actor, the enforcement model is flexible enough to modulate shifts between differing needs of the community (Braithwaite, 1993).



Graduated licensing scheme

A new regulatory scheme to focus on more attentive driving with in-vehicle telematics, would be seriously flawed if we failed to consider the learner driver market, as it is this group which are particularly vulnerable. Road trauma statistics show that in 2003, even though the age group between 18 and 25 years represent 14% of the Victorian licensed population, 24% of this population were killed on the roads (Transport Accident Commission, 2005). This does not include a measure of the number of non fatal accidents occurring on Victorian roads.

In the context of driver in-vehicle telematic distractions, several important issues emerge in respect to the youth crash statistics.

Firstly, research indicates that 'at-fault' crashes decline rapidly over "the first few months since obtaining a licence to drive, not over the first few years" (Williamson, 1999). This suggests that the primary cause for accidents may be experience rather than age, even though age related issues such as hormonal development, immaturity are sure to have an impact.

Secondly, there is evidence that female passengers and older passengers can have a positive influence of reducing crash risk for the youngest drivers and that carrying passengers who are friends or peers of the driver is most likely to increase the crash risk (Williamson, 1999).

Thirdly, the effectiveness of graduated licensing schemes is recognised to have a positive effect on the reduction of crashes in the youth market (Senserrick & Whelan, 2003). There are many variations of such schemes internationally; however, specific interest is directed at the Swedish model, which has a two option approach for learner drivers.

The proposal for the youth market (in addition to the other regulatory strategies discussed previously) is to introduce an expanded graduated licence scheme as follows:

- Initiate a two tiered licensing system. The first tier permits an individual to obtain a learner permit at 16 wherein stringent restrictions were imposed on driving practice until the age of 18 at which time the individual can apply for a licence. The restrictions would include no night time driving without supervision of an experienced driver, no peer passengers in the car at any time unless supervised by an experience driver, and speed restrictions. The second tier or option is for individual to simply remain with the existing system and obtain a learners permit at 17.5 years, requiring 6 months to acquire driving skills;
- Offer an incentive of a reduced term on 'P' plates when a young driver participates in an accredited course
- Introduce a requirement for an exit test to be undertaken by all P plate drivers in order to obtain a full licence (the exit test would be bound by the DQA requirements);
- Introduce the requirement that before accepting a licence to drive, the person signs a document acknowledging that the licence can be suspended or cancelled in circumstances of careless and inattentive driving.

Conclusion

The reality is, that unless Government takes steps to exert control over the rapidly accelerating telematics industry, we will see an increasing number of collisions on the road related to distracted driving.

Whatever the reasons, drivers fail to comprehend the dangers of distracted driving. While much can be done to ensure appropriate telematic design and integration, (according internationally accepted safety standards) we cannot ignore the desire for drivers to voluntarily participate in in-vehicle activities which ultimately impairs their driving behaviour.

The regulatory scheme proposed in this paper details a number of strategies aimed to address this area of harm. At the core, is a workable, and cost effective, compliance model which focuses on modifying driver behaviour. The task of making drivers accept more responsibility on the road, will only be achieved through the development of a continuum of regulatory actions; in this case legislative amendments, improved enforcement capabilities, a dedicated education strategy, control of product design and a new focus on the learner driver market.

The model is a dynamic construct which is positioned for organic growth; as the 'gaps in research' are filled (for example, as we better understand the effective methods of education) the model can be updated to provide a better outcome to the community, and perhaps, even save lives.

Bibliography

Australian Bureau of Statistics publication; 9314.0, Sales of New Motor Vehicles, Australia (Electronic Publication); <http://www.abs.gov.au/Ausstats/>. September, 2004

Australian Transport Safety Bureau (2004). Road Safety in Australia: A Publication Commemorating World Health Day 2004. Canberra, ACT: Australian Transport Safety Bureau.

Austrroads Inc, 'Austrroads Strategic Plan 2004-2007', ISBN 0 85588 703 6

Braithwaite, J. (1993). Responsive business regulatory institutions. In: C.A.J. Coady and C.J.G. Samford (Eds). Business ethics and the law, Sydney: Federation Press.

Braithwaite, J. & Makkai, T., (1994). Trust and compliance. *Policing and Society*, 4, 1-12.

British Standards Institution (1996). Guide to in-vehicle information systems. DD235

Dowling, J. (2004). Police call for text messaging ban in cars. *The Age* (Melbourne), 25 July 2004.

Driver Focus-Telematics Working Group (2002). Statement of principles, criteria and verification procedures on driver interactions with advanced in-vehicle information and communications systems. Washington DC: National Highway Traffic Safety Administration, United States Department of Transportation.

Filipini, M. (2002). *Employment Law Bulletin*, 8 (3), 20-21

Friedland, M.L., Trebilcock, M., & Roach, K. (1990). Regulating traffic safety. In: L.M. Mead (Ed.). *Securing Compliance: Seven Case Studies*, Toronto, University of Toronto Press. pp. 239-241.

Griffiths University News Service (2002). Results are in—Hands free mobile phones detrimental to control of a vehicle. 8 November 2002, Website: http://www.griffiths.edu.au/er/news/2002_2/02nov08.html

Government of Canada, Regulatory Alternatives Identification Kit Undated

- Gunningham, N. (1993). Environmental auditing: Who audits the auditors? *Environmental and Planning Law Journal*, August, 229-238.
- Harbluk, J. & Noy, Y. (2002). The impact of cognitive distraction on driver visual behavior and vehicle control. Transport Canada: Road Safety Directorate and Motor Vehicle Regulation Directorate, February 2002: TP 13889 E
- Japan Automobile Manufacturers Association (2000). Guideline for in-vehicle display systems. February 2000, Version 2.1
- Jennings, B. (2002). Look, no hands – and no eyes on the road, either. *Sydney Morning Herald*, 4 October 2002
<http://www.smh.com.au/articles/2002/10/03/1033538723965.html>
- Law for You; Fact Sheet; Driving Offences; <http://www.law4u.com.au>; 11/09/04
- Leigh, A. (2003). Thinking ahead: Strategic foresight and government. *Australian Journal of Public Administration*, 62 (2), 3-10.
- National Highway Traffic Safety Administration (1997). An investigation of the safety implications of wireless communications in vehicles. Washington DC: National Highway Traffic Safety Administration, United States Department of Transportation. Website: <http://www.nhsta.dot.gov/people/injury/research/wireless>
- National Highway Traffic Safety Administration (2002). Event data recorders. Docket No. NHTSA-02-13546; Notice 1. Washington DC: National Highway Traffic Safety Administration, United States Department of Transportation. Website: <http://www-nrd.nhtsa.dot.gov/pdf/nrd-10/EDR/EDRnotice-oct-10.02.pdf>
- National Occupational Health and Safety Commission; Compendium of Workers' Compensation Statistics, Aust, 2000-2001; Dec 2002 ISBN 1920763058
- New Zealand Land Transport Safety Authority (2005). Website: <http://www.ltsa.govt.nz/licensing/car/learner-restricted-3>
- Office of Regulation Reform, Regulatory Alternatives, State Government of Victoria (undated)
- Office of Regulation Reform, Regulatory Impact Statement Handbook, State Government of Victoria (undated).
- Office of Regulation Reform, Principles of Good Regulation; State Government of Victoria (undated)
- Oldenburg D. (2003). Big Brother hitches a ride in your car. *The Washington Post*, 15 September 2003. (Edwin Matos was convicted of manslaughter for traveling at excessive speed, killing two pedestrians.)
- Parker, C. (2000). Reinventing regulation within the corporation: Compliance-oriented regulatory innovation. *Administration and Society*, 32 (5), 529-565.
- Parkes, A. & Hooijmeijer, V. (2000). The influence of the use of mobile phones on driver situation awareness. Internet forum on driver distraction, hosted by the United States

National Highway Traffic Safety Administration, see www-nrd.nhtsa.dot.gov/departments/nrd-13/driver-distraction/PDF/2-PDF

Rowan-Robinson, J., Watchman, P. & Barker, C. (1990). *Crime and regulation: A study of the enforcement of regulatory codes*, Edinburgh, T&T Clarke.

Senserrick, T. & Whelan, M. (2003). *Graduated driver licensing: Effectiveness of systems and individual components*. MUARC Report No. 209. Clayton, Vic.: Monash University Accident Research Centre.

Senserrick, T.M.; Training 'Young drivers: Can it work?'; Proceedings of the Developing Safer Drivers and Riders Conference; 21-23 July 2002, Parliamentary Annex, Brisbane

Taylor, D., Bennett, D. M., Carter, M., & Garewal, D. (2003). Mobile telephone use among Melbourne drivers: A preventable exposure to injury risk. *Medical Journal of Australia*, 179 (3), 140-142

Telstra (2004). Telstra, Police and NRMA Insurance join forces to target mobile phone use on Australian roads. Telstra News Release, August 2004, www.telstra.com.au/newsroom

Transport Accident Commission (2005). Statistics, <http://www.tacsafety.com.au>

Transport Canada (2003). *Strategies for reducing driver distraction from in-vehicle telematics devices: A discussion document*. April 2003: TP 14133 E. Ottawa: Transport Canada: Road Safety and Motor Vehicle Regulations Directorate.

Vicroads, 'Who are we'. Website: http://www.vicroads/about_vicroads; accessed 5 September 2004.

Victoria Department of Justice (2004). *Culpable and dangerous driving laws*. Discussion paper, January 2004.

Victoria Department of Justice (). *Statistics of the Magistrates Court of Victoria 1998/1999*. ISBN 073062457-9

Western Australian Road Transport Authority, 'Road Safety Issues'

Williamson, A. (1999). *Young drivers and crashes: Why are drivers over represented in crashes—Summary of the Issues*; NSW Injury Risk Management Research Centre, University of New South Wales, December 1999.

Williamson, A. (2003). *Why are young drivers over represented in crashes? Summary of the Issues. Update of literature review: literature 2000 to 2003*, NSW Injury Risk Management Research Centre: University of New South Wales;: April 2003

Young, K., Regan, M., & Hammer, M. (2003). *Driver distraction: A review of the literature*. MUARC Report No. 206. Clayton, Vic.: Monash University Accident Research Centre.

Legislation cited

Corporate Law Economic Reform Program (Audit Reform and Corporate Disclosure) Act 2004 (Cth)

Road Safety Act 1986 (Vic)

Road Safety (Driving Instructors) Act 1998 (Vic)

Crimes Act 1958 (Vic)

Occupational Health and Safety Act 1985 (Vic)

Racial and Religious Tolerance Act 2001 (Vic)

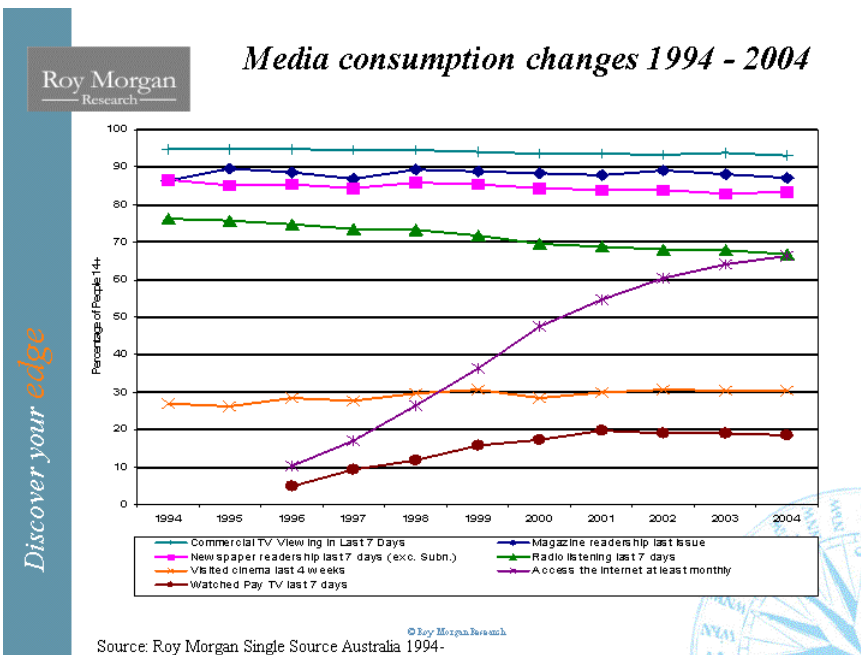
Land Transport Act 1998 (New Zealand)

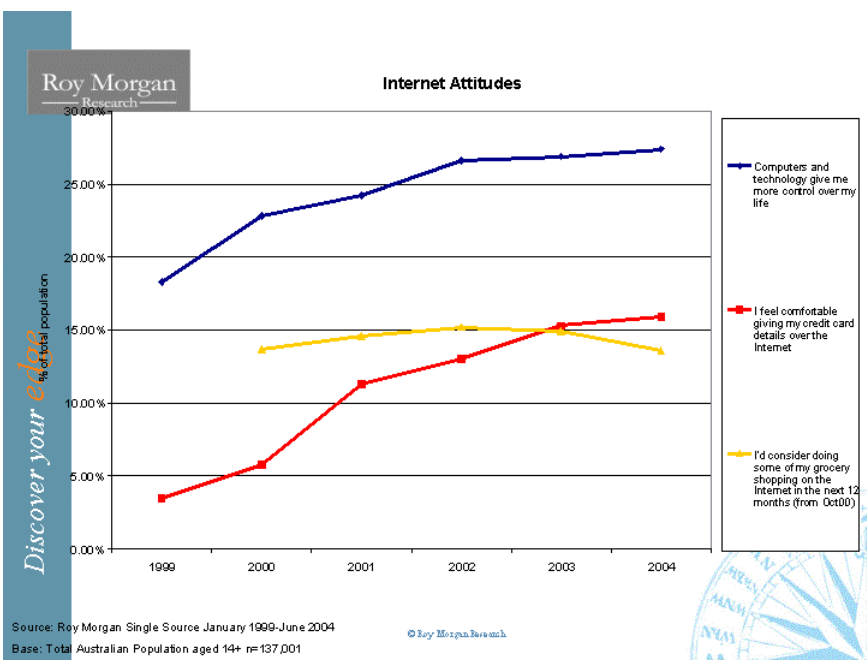
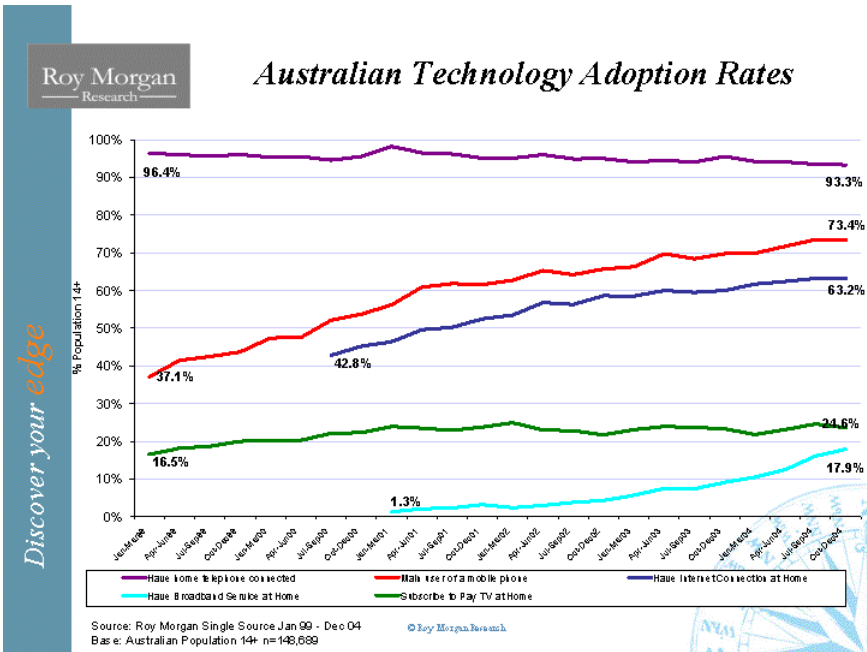
PRESENTATION SLIDES

In a police crackdown on the use of mobile phones by motorists in the Diamond Creek area during June [2004], 54 drivers were caught using mobile phone – including a 17 year old learner driver who was caught sending a text message while she was driving. Her mother was sitting beside her in the passenger seat.

The Age Newspaper, Jason Dowling; Police Call for text messaging ban in cars; July 25, 2004

© Roy Morgan Research





Area of Harm

- Proliferation of Telematics
- Body of Study
- Driver Overload
- Social Costs

© Ezy Morgan Research

Existing Regulatory Measures

Prohibition on the use of hand held mobile phones and visual display units

- Should there be broader scope?
- Is it empirically worse than other devices?
- Does it modify behaviour?
- Is it enforceable?
- Are there occupational pressures?
- Does it foster perception that other things are ok?

© Ezy Morgan Research

Existing Regulatory Measures

Offence	Act	Elements	Penalty
Culpable driving causing death	s.318 Crimes Act 1958	Person kills another person by driving a motor vehicle: (a)recklessly, or (b)grossly negligent, or (c)while under the influence of alcohol or a drug to such an extent as to be incapable of having proper control of the motor vehicle	Maximum of 20 years prison or \$240,000 or both Licence cancellation and disqualification for minimum of 2 years
Dangerous driving	s.64 Road Safety Act 1986	Person drives a motor vehicle at a speed or in a manner which is dangerous to the public, having regard to all the circumstances of the case.	Maximum of 2 years prison or \$24,000 fine or both. Licence cancellation and disqualification for minimum of 6 months
Careless Driving	s.65 Road Safety Act 1986	Person drives a motor vehicle carelessly	First offence is 12 penalty units. Subsequent offence 25 penalty units

© Roy Morgan Research

Non Regulatory Alternatives

**Advertising
Information Dissemination**

© Roy Morgan Research

Regulatory Space

Actors	Area of Harm	Area of Control
Driving Public	<ul style="list-style-type: none"> Over confidence; Lack of knowledge; social and work pressures to use telematics while driving 	<ul style="list-style-type: none"> Education, Legislative Reform to make drivers more responsible for their actions
Driving Schools	<ul style="list-style-type: none"> Questionable whether defensive driving courses are producing over confidence on the road generating counter productive risks 	<ul style="list-style-type: none"> Research on courses which benefit driver safety. Licence Driving Schools which undertake to conduct appropriate courses
Manufacturers: Motor Vehicle and telematic devices	<ul style="list-style-type: none"> Designs are not sympathetic to safe driving practices 	<ul style="list-style-type: none"> Establish a Code of Practice for design of telematic devices Enforced liability for non compliance
Employers/Employees & Unions	<ul style="list-style-type: none"> Many work related demands on the driver; little responsibility of employer Union interest in safety of worker 	<ul style="list-style-type: none"> Expanded OH&S provisions to promote employer responsibility to the employee.
Peak Bodies	<ul style="list-style-type: none"> Exert little influence or enforceable control over driving behaviour 	<ul style="list-style-type: none"> Lobby group to influence private sector market i.e. insurance companies Powerful information dissemination capabilities
Motor Vehicle Dealers	<ul style="list-style-type: none"> Little interest in safety of driver 	<ul style="list-style-type: none"> Liability to sell only vehicles manufactured under code
Regulatory Authorities	<ul style="list-style-type: none"> Piecemeal approach ignoring global environment and its implications. Ineffective enforcement capabilities 	<ul style="list-style-type: none"> More tools available for enforcement. Shift responsibility to drivers and third parties

© Ezy Morgan Research

Regulatory Model

Consistency with Government Regulatory Principles

Prioritise Compliance

Strategic Foresight

Why outlaw?

Constraint of Individuals

Perception of Deterrents

-Office of Regulatory Reform (Vic)

-Harness technology to our advantage; don't hide

-Recognise the complexity of technology

-Think ahead; think innovation

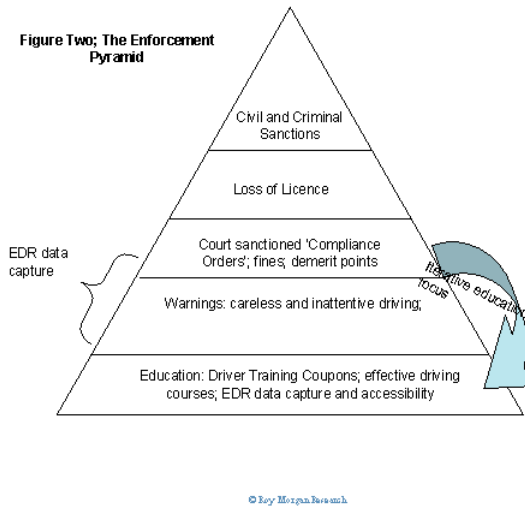
-Enforcement/ What Class of Product?

-Discretion; zero tolerance?

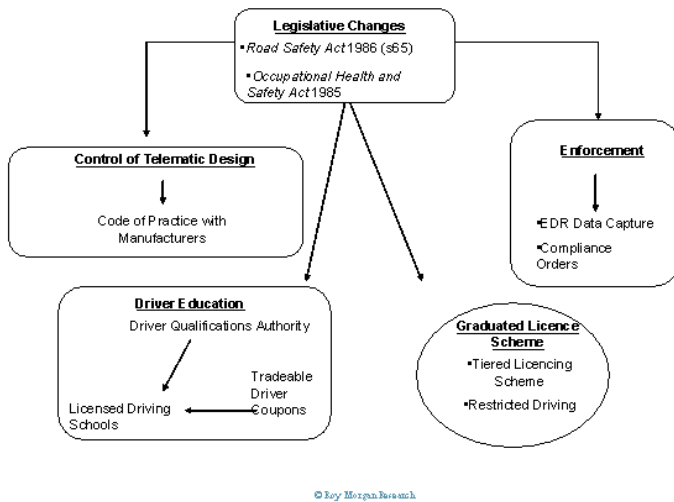
-Deterrent fit the crime

© Ezy Morgan Research

Enforcement Model



Reform Model



Summary

- *Call to exert control*
- *Broad Platform*
- *Allows for organic growth*

© Roy Morgan Research