

Road Safety and Insurance Markets Overview

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ROAD SAFETY AND INSURANCE MARKETS OVERVIEW

DISCUSSION PAPER

Dr Andrew Fronsko September 2011

1. INTRODUCTION

Road trauma is the biggest killer of young people in the world. Reductions in the incidence and severity of road related trauma is of paramount importance to society, aimed at reducing the personal and economic burden to injured people and flow-on impact to families and the broader community.

The UN estimates that the economic cost of road trauma to developing countries alone is at least \$100 billion per year. The emotional cost is impossible to calculate. Yet road trauma is preventable. Australia has demonstrated that investment in road trauma prevention is the single most effective way of reducing the impact that it has on the community.

The effective and efficient operation of insurance markets plays a vital role in improving road safety outcomes. This can be achieved in areas such as the development of insurance products that help reduce the finance burden of injury; providing education and incentives to encourage safer road-user behaviour; pooling of data to help inform decision making and consumer choice; and, seeking to embrace collaborative efforts within competitive environments to provide mutual benefit to stakeholders and society.

This paper provides a brief overview of the nature and characteristics of insurance markets, highlighting key challenges. The paper aims to provide additional insight when developing and considering opportunities for insurance markets to deliver better road safety outcomes.

2. OVERVIEW OF INSURANCE PRODUCTS THAT INTERSECT WITH ROAD USERS

2.1. Nature of Insurance

Most forms of insurance aim to transfer the exposure to (or risk of) financial loss that an individual or entity (first party) sustains from an incident or event to another party (second party), generally the Insurer.

An *ex-ante* premium is generally paid by the insuree to create the policy (or to be covered under an insurance scheme). The premium pool so collected is used to fund benefits for eligible claimants covered under the insurance scheme/policy in the event of an incident or event. Beneficiaries of insurance claims may be the first party, and/or another individual/entity (third party) depending on the type and characteristic of insurance scheme/policy.

General features of Insurance include

- a) Risk Transfer legally enforceable;
- b) Consideration generally, premium related to risk/benefits;
- c) Risk pool created if there are many parties; and
- d) Distribution of benefits from pool.

Typically, an insurance scheme/policy has two components, subject to defined thresholds, caps and conditions:

- a) Benefits that an eligible party is entitled to claim; and
- b) *Indemnification* of the first party (covered by the insurance policy or scheme) with respect to financial losses as a result of their negligence that a beneficiary may be entitled to claim (to the extent that the indemnification matches the benefits).

2.2. Types of Insurance Utilised by Road Users

Various types of insurance can be utilised by vehicle owners/operators and road users, and often are relied upon as a first resort in the event of an incident or event causing property damage or injury, these are shown in Table 1.

Amongst most international jurisdictions, General Insurance is utilised to cover motor vehicle property damage and is often a discretionary purchase. Casualty: Auto Liability or Compulsory Third Party (CTP) Insurance and Workers' Compensation is used is utilised to cover personal injury and is a generally a compulsory form of insurance (workers' compensation is sometimes utilised if the injury was sustained in a motor vehicle during the course of employment or journey to/from work).

In some cases, Pubic Liability Insurance can be called upon (for example, a pedal cyclist injured in an accident on a public road with no ability to claim on any of the above forms of insurance may attempt to sue [seek damages] from the Local Authority or Road Authority if the accident occurred as a result of poorly maintained infrastructure).

Table 1: Common types of Insurance that intersect with road use

Insurance Type	Description	Comment				
MAJOR INTERSECT	MAJOR INTERSECT					
Motor Vehicle Property - Third party - First party - Comprehensive (1 st +3 rd party)	Covers property damage and theft. Insurance may be limited to damage to a third party's property as a result of fault by the owner/operator of the insured vehicle, and/or property damage or loss of the insured's vehicle (first party) irrespective fault.	In most jurisdictions insurance is a discretionary purchase. Some jurisdictions (UK and USA) mandate a minimum level of third party property damage.				
Personal Injury: Auto Liability (Compulsory Third Party) - Third Party (C/Law) - First Party (No-Fault)	Covers personal injury costs or damages incurred by a <i>third party</i> as a result of fault by the owner/operator of the insured vehicle. Some jurisdictions offer no-fault <i>first party</i> coverage irrespective of fault.	Generally, compulsory for most types of motor vehicle to be legally operated on public road. In many jurisdictions compensation is based on fault or negligence principles, with some jurisdictions offering nofault coverage.				
Personal Injury Worker's Compensation	Covers personal injury costs or damages incurred in the course of employment.	Generally compulsory for employers over a certain size. In most jurisdictions compensation is based on nofault principles, with some jurisdictions providing add-on negligence based compensation.				
SECOND ORDER INTERSE	СТ					
Public Liability Insurance	Covers damages incurred by a third party through injury, death or property damage from the negligence of the insuree.	In most jurisdictions insurance is a discretionary, with compensation based on fault or negligence principles.				
Health and disability Insurance	Covers the hospital, medical and like expenses among individuals.	May be a blend of private insurance, and social insurance.				
Unemployment Insurance	Provides safety-net level of financial support to those who are unemployed before retirement age yet seeking work	Generally delivered as a form of social insurance and may be means tested to determine eligibility.				

2.3. Key Characteristics of Insurance Products

Key characteristics of the Australian insurance market are explored below and summarised in Table 2 for the purposes of comparison.

2.3.1. Adequacy Objective

Insurance Type	Description
Individual Adequacy	Premiums largely determined on an actuarial basisRedistributive amongst insureesStandard model for competitive insurance market
Social Adequacy	Public tax-transfer systemBenefits related to needsSocial assistance/welfare

Most insurance products are risk rated at least to some extent, in that the premium charged to individual is reflective of their risk (individual adequacy). As it is expensive and impractical to collect detailed information at an individual level to determine risk exposure and behaviour, for the purposes of premium determination, similar groups (cohorts) of an estimated to be of a similar risk profile are determined using one or more rating factors. This implies that cross-subsidies within cohorts will exist (and potentially between rating cohorts).

The Social Adequacy objective is generally associated with *social insurance* schemes that generally provide cover the whole community as a form of social assistance or welfare. The following definitions are helpful in attempting to define social insurance:

.. the purpose of social security should be to ensure to everyone up to a sustenance level of income, in return for compulsory contributions ... the main instrument to achieve this was to be unified and compulsory social insurance, through which benefits would be paid out in return for premiums (Lord Beveridge 1942; summarised by Lundholm 1991).

... insurance characterised by the notion that the obligation to pay contributions and taxes brings entitlement to a share in social welfare when we are in need of it. The main aim is to guarantee the population a certain level of security in their lives (Försäkringskassan, Sweden 2001).

2.3.2. Funding

A fully funded premium when collected for an underwriting period is adequate to cover the expected total cost of claims as they are incurred and ultimately paid. In many forms of social insurance, premiums are levied to cover only the expected cost of claims payments during a period of time (pay-as-you-go or PAYG), the key challenge being intergenerational risk transfers if the premium collected does not yet match the liability incurred for the collection period (especially for long tail no-fault insurance schemes).

2.3.3. Community Rating

In a pure *community rated* scheme, individuals pay the same premium (or proportional amount relative to their income) irrespective of their risk. Where no community rating applies, premiums can be set based on the insured's risk (*risk-rated*). It is possible to have a blend – for example, in CTP insurance in New South Wales, Australia (privately Andrew Fronsko — *Discussion Paper 2011-25* — © OECD/ITF 2011

underwritten), premiums for each class of vehicle are set on a risk-rated assessment of an individual's psycho-demographic characteristics and risk exposure, but subject to restrictions on premium loadings or discounts.

2.3.4. Underwriting

The underwriting of an insurance scheme may be undertaken by either the *private sector* (where shareholders supply capital and bear the financial risk¹). In contrast, insurance schemes may be underwritten by entities owned by the government *or public sector* (e.g., the Transport Accident Commission, Victoria, Australia) where either an explicit or implicit financial guarantee applies.

2.3.5. Typical Exposure

In *long-tailed* insurance classes, such as personal injury compensation schemes, there may be many years between the time the claim is made and ultimately paid/finalised (e.g., 4+ years on average). In contrast, with *short-tailed* schemes such as motor vehicle property damage insurance, claims are generally reported and paid within a short period of time (typically less than one year from the accident date).

2.3.6. Beneficiary Party

The beneficiary of an insurance policy may be the *first party* (in the case of automobile insurance the owner or operator of the motor vehicle covered by the insurance scheme/policy), or a *third party* who suffers loss or injury as a result of negligence or actions of the first party.

2.3.7. Claim Order

In some insurance schemes/ policies, the entitlement to access benefits under the policy is not dependent of other sources of insurance or funds the insured may be able to call upon. These are referred to as *first-resort* schemes, and include CTP Insurance and most General Insurance products. Some schemes/policies can be accessed only after all other avenues are exhausted (*last-resort*), or subject to *means testing* with respect to first seeking reliance on ones' own wealth or income generating capacity before a claim can be made.

2.3.8. Participation

Some forms of insurance are *compulsory* (such as CTP Insurance), whereas others can be a *discretionary* purchase (such as General Insurance), noting there may be a blended approach such a requiring a minimum level of General Insurance coverage for certain activities (in most US jurisdictions a minimum level of third party motor vehicle property damage insurance is required to legally operate a motor vehicle on a public road). *Universal* coverage generally applies to social insurance schemes where the entire community is provided cover (such as unemployment insurance, or accident insurance as applies in New Zealand and Saskatchewan).

In privately and publicly underwritten schemes in Australia, the financial risk of insurer insolvency or liability arsing from uninsured, unidentified vehicles rests with the government or responsible agency.

Table 2: Characteristics of Insurance in the Australia Market

Segment / Characteri stic	General(Mot or) Insurance	Auto Liability (CTP) Insuran ce	Workers' Compensat ion Insurance	Public Liability Insuranc e	Private Health and Disability Insuranc e	Social Health Insuran ce	Unemploym ent Insurance
Adequacy Objective	Individual	Hybrid	Hybrid	Individual	Individual	Social	Social
Funding	Fully Funded	Fully Funded	Fully Funded	Fully Funded	Fully Funded	PAYG	PAYG
Communit y Rating	No	Partial	No	No	No	Yes	Yes
Underwriti ng	Private	Blend	Blend	Private	Private	Public	Public
Typical Exposure	Short Tail	Long Tail	Long Tail	Med-Long Tail	Short Tail	Long Tail	Long Tail
Beneficiar y Party	First	Third + First	Third + First	Third	First	First	First
Claim Order	First Resort	First Resort	First Resort	First Resort First call on CTP/WC	First Resort First call on CTP/WC	Last Resort Means Tested First call on CTP/WC	Last Resort Means Tested First call on CTP/WC
Participati on	Discretionary	Compuls ory	Compulsory	Discretion ary	Discretion ary	Universa I	Universal

Source: Fronsko 2011

3. INSURANCE & MOTIVES FOR SAFE ROAD USER BEHAVIOUR

3.1. Moral Hazard

Whilst insurance provides social utility through the protection of the assets of the insured, there is an argument that the indemnification of the insured may dull incentives for safe behaviour. This is often referred as "moral hazard" in that the insured has an economic incentive to cause the situation he/she is insured against, an incentive that is not present when he/she is not insured (Mehr, Cammack and Rose 1985, Shavell 1986).

The nature of CTP Insurance schemes in providing third party coverage make the dynamics of moral hazard complicated, given the injured party may not offer have full control of the environment and circumstances relating to the accident/injury and the first party is generally indemnified against financial loss. With respect to public safety, the regulation and enforcement of the environment and codification of duties of care and responsibilities through Road Safely legislation reinforce incentives for safe behaviours. Moreover, it is likely that factors such as self-preservation of life and societal attitudes reinforce motives for safe behaviour for both first and third parties. Thus, there are powerful ameliorating factors that can guard against the risk of public safety being compromised due to the existence of a compensation scheme with first party indemnification (Fronsko 2001, p27).

Notwithstanding, a number of policy and regulatory responses can be effected to guard against this hazard, including:

- Mandate partial coverage in insurance contracts, or impose deductibles and thresholds
- Insurance contracts to stipulate duties on the insured, and penalties for breaches.

3.2. Judgement Proof Problem

There is an argument that injurers may lack the assets to pay fully the amount (to the injured) for which they are liable. This may lead to a propensity not to purchase liability insurance and with limited financial assets at risk could lead to a tendency for injurers to engage in excessive risky activities and to fail to exercise adequate care when doing so (Shavell 1986). A social issue therefore arises - the risk that victims are not fully compensated for losses.

This is a key motive for mandating compulsion in motor vehicle liability insurance, in particular that for personal injury.

A number of criticisms of the judgement proof problem have been raised. The argument fails to recognise incentives for preservation of one's own life/health (or negative externality impacts to loved ones) in evaluating motives to avoid risky activity/behaviour. It also ignores merits of first party insurance and assumes tort remedy is optimal for behavioural incentives.

A summary of potential policy responses to issues identified above is presented at Table 3.1 below.

Table 3.1: Potential Policy Reponses to Moral Hazard and Judgement Proof Problem

Po	tential Policy Response	Injurer's excessive engagement in risky activity & dulling of incentives to take adequate care	Inadequate compensation by injurers (to victims)
a.	Mandate purchase liability [third party] insurance	✓	✓
b.	Prohibit purchase of liability [third party] insurance for certain high-risk activities	✓	
c.	Minimum level of assets to engage in a risky activity [potentially subject to (d) below]	✓	✓
d.	Extension of liability to parties related to the injurer (e.g employer liability, joint & several action)	✓	√
e.	Safety Regulation	✓	
f.	Civil and Criminal penalties	✓	
g.	Prohibition of risky activities	✓	
h.	Victims mandated to obtain [first party] insurance		✓

Adapted from Shavell 1986

In Australia, road safety and traffic legislation and associated regulations, mandate minimum safety standards for motor vehicles, and registered motor vehicle categories that may legally operate in public places. Legislation also provides civil and criminal penalties for inappropriate road user behaviours and activities (such as speeding, driving under the influence of drugs and alcohol, mobile phone use while driving, failure to wear a seat belt or helmet, etc). More recently in Australia there has been a move to provide additional powers to police and the courts to manage risky anti-social behaviour such as hoon-driving - refer for example, the recently introduced Anti-Hoon Driver legislation in Victoria, allows police or the courts to immobilise or impound vehicles involved (State Government Victoria 2011).

In concert with the above, statutory and private insurance markets in Australia have responded in various ways to address residual risks associated with moral hazard through the provision of financial incentives and benefit reductions to encourage safe road user behaviours. To illustrate, a brief summary of regimes that operate in Victoria Australia is provided at Table 3.2 below, noting the extension of incentives into the licensing system to reward long-standing safe driver behaviour.

Table 3.2: Incentive and Disincentive regimes impacting motor vehicle owners and operators in Victoria, Australia ²

Transaction	Financial Incentives	Reductions on Benefits/Eligibility	Policy Exclusions	Excess
Compulsory Third Party (liability insurance for bodily injury) Transport Accident Commission	Not Applicable (CTP premiums in Victoria are community rated by vehicle class and zone, without regard to prior driving record/experience)	- Exemption from no-fault entitlements for loss of earnings may apply if convinced of certain offences under the Road Safety Act, or the vehicle was unregistered or the driver was not holding a current licence, or the incident resulted in being convicted of an indictable offence [s.40(1)]. - Exemption or reduction in Loss of earnings, loss of earning capacity and impairment benefits may apply for road offences (including prescribed reductions for offences within certain BAC bands) [s.40(1)-(6)]. - Generally courts will apply a reduction of about 25% contributory negligence in common law awards for failure to wear a seatbelt/helmet ³ .	Motor sport accidents [s.41]. unregistered/uninsured motor vehicles on private land [s.41A,B].	- Medical Excess (circa \$500).
General Damage (Property) Insurance (discretionary purchase)	Risk rated premium setting generally applies, taking into account prior driving record/experience. No claim discounts may apply in premium pricing. Experienced drivers with a very good driving record (Rating 1), premium discounts of up to 60% may apply, and be maintained for life regardless of future claims being made.	 Generally, a breach of policy conditions results in total, rather than partial exclusion from benefits (and may open the path for recovery action by third parties). In some instances, drivers not protected by Rating-1 for life benefits, may elect not to claim if they are at-fault to protect no-claim discounts. 	Exclusions may apply for policy breaches, such as driving unlicensed/ unregistered, if the incident results in being convicted of a road traffic offence (ie speeding, drink driving, etc).	Claim excesses may apply as determined by the purchaser at policy inception, (typically consumers elect for \$300-\$500). The premium charged s reflective of the policy excess.
Licensing	From 2006, Victorian permit/licence holders with a good driving record, over a three year period are rewarded with a 25% discount on their licence renewal fee under the Driver Reward Scheme.	Accumulation of demerit points for road traffic offences over a period of time may result in suspension of licence	Not applicable	Not applicable

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² Refer Appendix 3.1 for relevant extracts from the Transport Accident Act 1986 (Vic), and Appendix 3.2 for summary of the demerit point regime for licensing in Victoria.

³ In Common Law CTP Schemes in and NSW, Qld, awards for damages are reduced by a mandatory 25% for failure to wear a seatbelt or helmet.

4. INSURANCE MARKET DYNAMICS - RESIDUAL ISSUES

Whilst insurance schemes and markets can be structured and regulated to address moral hazard risks, a number of residual challenges remain to ensure alignment with road safety outcomes, summarised in table 4 below.

Table 4: Potential Reponses to Residual Issues associated with Insurance Market Dynamics

Theme / Issue	Cause/Consequences	Potential Responses
Adverse Selection ⁴		
Individual risk rating is too expensive leading to information asymmetry between the insured and insurer. Cross subsidisation may be imposed as an instrument of redistribution of welfare or wealth which may weaken or be in conflict with price signalling incentives for safe vehicle selection and road user behaviours.	 undisclosed/ unknown risky behaviours of the insured, may lead to Ineffectual price signalling, and good risks pricing out bad leading to insurer financial instability. Consumers with propensity to undertake extreme risk activities may be attracted to insurance schemes offering benefits/identification for those activities (eg motor racing), leading to loss of disincentives for risk behaviours and potential insurer/scheme financial instability. Community rating of premiums may result in consumer selection of more vulnerable motor vehicle classes than would otherwise be the case were premiums more reflective of risk or cost (eg motorcycles). 	 Application of excesses on certain benefits/ indemnities before claims under an insurance policy can be evoked. Mandate disclosure and minimum level of insurance coverage for certain high-risk activities. Accept that cross-subsidies exist.

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Potentially, under *adverse selection*, compulsion can be Pareto improving if additional insurance coverage is allowed. Under *moral hazard*, compulsion can be Pareto improving: to provide improvement compulsion has to prohibit purchase of additional insurance coverage (Lundholm 1991)

Theme / Issue	Cause/Consequences	Potential Responses
Market Imperfections		
Missing markets. Lack of economies leading to high transactional costs.	 Private Insurance markets immature, hence inaccessible to consumers seeking insurance coverage to conduct certain activities. Private insurance markets either unwilling or unable to bear the risk for certain activities/ consumer cohorts leading to accessibility and affordability constraints. 	 Mandate minimum level of insurance coverage to create critical mass. Consider public monopoly underwriting.
Consumer Ignorance and Irrationality		
Mitigate reasons why persons do not purchase insurance, or undertake risky activities or behaviours.	 Irrationality e.g. consumers' probability of loss estimates can be erroneous (Diamond, 1977; Feldstein, 1977), leading to propensity to engage in risky activities and behaviours. Ignorance and high cost of public choice and information accessibility (Diamond, 1977), leading to propensity not to purchase insurance. 	 Mandate minimum level of insurance coverage for certain activities, Regulation or issue guidelines to ensure consumers are appropriately informed on the accessibility of insurance. Prohibition of risky activities and behaviours supported by enforcement. Public education and information and dissemination of information of safer road user attitudes and behaviours. Mandate restriction of vehicle types for inexperienced drivers/riders⁵

For example, in Victoria, learner and probationary riders are only allowed to ride motorcycles and scooters on the list of approved motorcycles for novice riders under the Learner Approved Motorcycle Scheme (LAMS) – refer **Appendix 4**.

Theme / Issue	Cause/Consequences	Potential Responses
Competitive Dynamics Economic imperative for insurers to benefit shareholders in the short-term as a key priority, rather than broader societal benefit which may have longer term return. There may exist an incentive to maintain/encourage information asymmetries to protect competitive advantage, and push bad risks to competitors rather than investing is system-wide solutions.	 Insurer's short-term profit motive may weaken incentives to invest initiatives that yield larger benefit in the longer-term Insurers may have financial incentive to invest in road safety initiatives that benefit their own client-base/portfolio, in preference to initiative that impact the broader community where competitors may also benefit from that initiative. 	 Levy premiums to fund public safety improvement initiatives (relative to the risk being underwritten) that generate long term community benefit⁶. Mandate submission of select datasets to a central repository for public use and analysis. Coordination on road safety related activities that insurers may conduct on their client base, to ensure alignment of campaigns across the industry and juristic ions to leverage maximum impact (refer ferromagnetism metaphor in section 6 below).

⁶ In this instance, benefits may be calculated on societal benefit, rather than benefit to the insurer.

5. PUBLIC VS PRIVATE UNDERWRITING

While it is prudent for government (public) insurers to be financially viable and generate a reasonable return on capital, they often have a "whole of scheme" approach, with performance goals more likely to be aligned to the achievement of legislative objectives, which include both financial and social objectives.

As such, public insurers may take longer term view when it comes to road safety investments (e.g., forgo lower short-term profits to invest in road safety programs, with the view to reap longer term benefits in lower premiums and lower societal health and disability costs). The objectives typically associated with Private and Public Underwriting are illustrated in Figure 1, below.

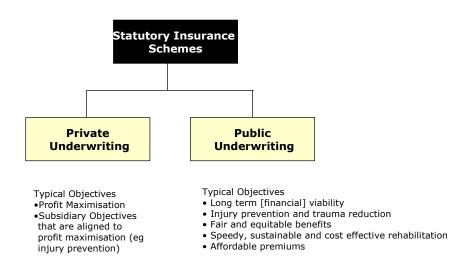


Figure 1. Typical Objectives of Public and Private Underwriting in Statutory Insurance Scheme

6. COMPETITIVE FEDERALISM: A POLICY LENS FOR IDEA GENERATION

In light of the above, what can be done to encourage insurance markets and/or incentivise insurers to operate in a manner to improve road safety outcomes to the broader community?

Using the lens of "competitive federalism", insurance schemes (and insurers) are viewed as having freedom to adapt and respond to needs specific to their jurisdiction (or shareholder risk preferences).

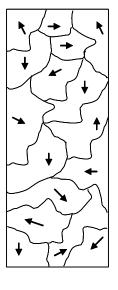
A competitive federalism model as it operates in Australia, in theory, allows schemes to adapt and respond to needs specific to the jurisdictional, and provides the opportunity to act as "policy laboratories" that over time jurisdictions may identify and gravitate to policies that demonstrate success (Victorian Government 2003 pp.2-3, Osborne 1988) or

stand the test of time. It also provides the opportunity to learn from policy failures in other jurisdictions (Jewett 2001, Fronsko 1999).

The key challenge under the *competitive federalism* approach is to minimise the risk of destructive competition and coordination failure with respect to road safety outcomes.

To this extent, there is merit in developing and array of cooperative arrangements within the insurance system (with impetus from regulators as appropriate) that may include, and not in order of priority:

- clear articulation of accountabilities within the road safety system (refer Appendices as an example);
- integrated cooperative frameworks to develop and oversee the implementation of various reform measures;
- improve the accessibility of information to the public to make informed choices;
- public education where ignorance or irrationality of risk assessment may be present;
- pooling of scheme data to assist with risk identification, policy development, public education and informed consumer choice;
- benchmarking activities (process and performance) ...working group exchanges to share key lessons that can be broadly levered across many jurisdictions; and
- coordination of micro-activities among insurers to amplify impact (refer illustrative metaphor below)



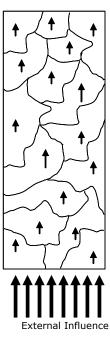


Figure 2. Ferromagnetism Metaphor

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GLOSSARY (DEFINITIONS)

Add-on No-Fault Under *add-on no-fault* approach, the underlying scheme is

common law (without restriction to sue the at-fault party or recover non-economic loss) and a select set of first-party

coverage benefits are simply added on.

Contributory Negligence Reduction of damages based on the plaintiff's failure to take reasonable care for his or her own safety and well-being that contributes to the injuries suffered, the accident causing the damage, or the occurrence of a situation in which injuries are foreseeable (Butterworths. Australian Legal Dictionary).

Common Law The system of laws developed by successive decisions of the

courts and the role of precedent (Industry Commission

1994).

Compulsory Third Party (CTP)
Insurance

Indemnity for liability incurred with respect to death or bodily injury, and access to economic and non-economic

compensation to first party bodily injury for eligible claimants

injured in a motor vehicle accident.

Fault (at-fault) Negligence; an error or defect in judgment or conduct; any

deviation from prudenance, duty, or rectitude; any shortcoming or negligent care or performance resulting from

inattention, incapacity, or perversity; a wrong tendency, course or act; bad faith or mismanagement; neglect of duty

(Black 1991, p.608)

First Party The person [party] responsible for the accident.

Hazard A condition that may create or increase the chance of loss

arising from a given peril (Mehr, Cammack and Rose 1985, p.

23).

Modified No-Fault Under a *modified no-fault* approach, a set of compensation

benefits is provided without regard to fault. However, the injured party retains the ability to sue the [at-fault] third party for certain damages that are in excess of *no-fault* entitlements,

provided the injury meets or exceeds a certain threshold.

Moral Hazard An individual characteristic of the insured that is indifferent to

loss ie "what's there to worry about, I've got insurance" (Mehr,

Cammack and Rose 1985, p. 23).

Morale Hazard An individual characteristic of the insured that increases the

probability of loss arising from dishonesty of the insured, eg

arson loss (Mehr, Cammack and Rose 1985, p. 23).

Negligence The omission to do something which a reasonable man, guided

by those ordinary considerations with ordinarily regulate human affairs, would do, or the doing something which a

reasonable and prudent man would not do.

The law of negligence is founded on reasonable conduct or reasonable care under all circumstances. The Doctrine of negligence rests on duty of care of every person in his conduct

towards others from which an injury may result (Black 1991, p. 1032).

No-Fault A type of automobile insurance in which each persons' insurer

pays for injury or damage up to a certain limit regardless whether the insured was actually at-fault (adapted from Black

1991, p. 1048).

Lack of legal blameworthiness (Industry Commission 1994).

Peril Cause of Loss (Mehr, Cammack and Rose, 1985).

Second Party The Insurer that underwrites the Third Party (or First Party)

CTP Insurance Policy.

Statutory Compensation Scheme A scheme or arrangement that is: (i) established by an Australian law; and (ii) under which compensation is payable for particular kinds of injury, loss or damage; and (iii) that is specified in the regulations or that is of a kind specified in the regulations (definition used by Australian Tax Office).

Strict Liability Liability without fault (Black 1991, p. 1422).

Liability for damages without need to prove negligence or fault. The defendant is liable irrespective of an absence of negligence

or intention on his/her part and even if he or she took

reasonable care to prevent damages (Butterworths. Australian

Legal Dictionary).

Third Party Person(s) [party] injured by the [at-fault] first party.

Tort / Delict A private or civil wrong, independent of contract, arising from

wilful or negligent misconduct in breach of duty owed to an

injured person (Industry Commission 1994).

A private or civil wrong or injury, including action for bad faith breach of contract, for which the court will provide remedy in the form of an action for damages (Black 1991, p.1489).

Tort (Negligence) /
Delict

The tort or negligence consists of the existence of a legal duty owed to the plaintiff by the defendant and breach of this duty, there being a proximate causal relationship between the breach and the plaintiffs injury, and damages (adapted from Black

1991, p.1489).

APPENDIX 1

National Road Safety Strategy 2011-2020 Australia

http://www.atcouncil.gov.au/documents/files/NRSS 2011 2020 20May11.pdf [extract]

National Road Safety Strategy 2011–2020

Corporate responsibility

Companies and other employers will play a major role in building a road safety culture for Australia, particularly in the area of workplace reforms.

The links between work and road crashes are well established. On average, company drivers travel more than twice the annual distance of private car drivers and have about 50 per cent more incidents. This suggests fertile ground and great potential rewards from improving road behaviour by working closely with organisations and employers.

The potential costs of inaction are high. Overall, work-related road crashes in Australia account for about half of all occupational fatalities [10] and 15 per cent of national road deaths, and many people are killed or seriously injured in motor vehicles or as bicyclists or pedestrians getting to and from work.

Corporate action can reduce employee involvement in road crashes through workplace policies and practices that value and promote road safety, encourage safe road user behaviour among employees and contractors, and provide for the purchase of vehicles with high safety ratings.

Organisations have legal responsibilities to provide a safe workplace and actively manage for a safety-focussed environment. Specific Australian legislation designed to ensure organisations meet this primary obligation can be found in:

- · The Corporations Act 2001, and
- · Occupational Health and Safety Act 2004

A number of Australian companies and organisations have already implemented road safety related policies. Important innovations include:

- introducing workplace road safety policies (for example, requiring strict compliance with the road laws from employee drivers and encouraging a focus on reducing driver distractions by requiring pulling over to answer mobile phone calls
- focusing on safety behaviours in recruitment and selection
- including road safety requirements and skills in induction programs to embed a safe driving culture
- prioritising road safety records in fleet selection and maintenance (for example, requiring 5-star ANCAP rated vehicles where possible and ensuring key safety features are fitted to all new vehicles)
- providing ongoing training and education of staff to build road safety awareness and skills

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APPENDIX 2

POLICY HANDBOOK ON NATURAL HAZARD AWARENESS AND DISASTER RISK REDUCTION EDUCATION (2010)

Roles of stakeholders

Long-term strategic planning and cross-sectoral collaboration are fundamental components of successful education programs for risk awareness and reduction. Many stakeholders have a role to play and responsibilities in this respect: the parallel and collaborative actions of international organisations, governmental bodies, insurance sector representatives, corporate leaders, civil society organisations, and educational institutions should be encouraged.

Role of public sector. The public sector, at all levels (local, regional, national, and supranational), should take a leading role. The public sector's roles and responsibilities largely depend on the scope and level of hazards and vulnerabilities, existing initiatives, and available resources. The public sector should first set priorities and then focus on coordination and leadership in the development of national or regional programs and policies: public awareness campaigns, informational websites and the distribution of educational material are among the available tools. Support should also be granted to existing programs at local and community level, as well as to private and civic sector initiatives. Special attention should be devoted to the opportunity to incorporate risk awareness and reduction strategies into school curricula and higher-level educational programs. The provision of fiscal incentives (e.g., tax subsidies) may bring attention to cost-effective risk mitigation measures at the individual or business level.

Role of private sector. Private sector initiatives can play an important role; for instance, the research, advocacy and public education efforts of international reinsurers and national insurance companies can provide significant sectoral leadership in developing and promoting physical and financial protection tools for catastrophic risk. Leadership by example can also be provided by corporations through the adoption of employee education programs, risk reduction measures, and business continuity plans.

Role of civic sector. Independent civic organisations and public-civic partnerships addressing natural hazard awareness and disaster risk reduction at community level should be promoted. Grassroots efforts are grounded in the local physical, cultural, economic and political context of a community and they can prove to be extremely effective even if sometimes they may lack sufficient human capital and economic resources. Partnerships with the civic sector, therefore, should be supported and enhanced as part of a holistic, top-down and bottom-up integration strategy. Support should also be provided to community-level preparedness by ensuring that appropriate emergency supplies are available, thus helping well-prepared communities to act as the first line of defence.

Role of international organisations. International organisations and regional and international collaborations can help focus the attention of national governments and policy makers on the importance of natural hazards awareness and disaster risk reduction education programs. International organisations have a key role to play with regard to long-term planning as they are decoupled from the shorter-term political mandates of national, local and local decision-makers. International efforts may also lead to the establishment of transnational platforms and networks aimed at developing a coherent cross-border approach to disaster risk management strategies.

APPENDIX 3.1

TRANSPORT ACCIDENT ACT 1986 (VIC.) – Section 40 Circumstances in which certain compensation⁷ is not payable or is reduced

- (1) The Commission is not liable to pay compensation under section 44 or 45 to a person who is injured as a result of a transport accident if-
 - (a) the person-
 - (i) was driving a motor vehicle at the time of the transport accident; and
 - (ii) is convicted, in respect of driving the motor vehicle at that time, of an offence under <u>section 49(1)(a)</u> of the *Road Safety Act 1986* or under a law that is, in relation to that Act, a corresponding law- unless the person satisfies the Commission that the intoxicating liquor or drug did not contribute in any way to the transport accident; or
 - (b) the person was, at the time of the transport accident, the driver of, or a passenger in, a motor vehicle owned by the person in respect of which a transport accident charge payable in respect of a period including that time had not been paid; or
 - (c) the person was, at the time of the transport accident, the driver of a motor vehicle and-
 - (i) had never held a licence to drive a motor vehicle of that class under the *Road Safety Act 1986* or a corresponding previous enactment or under a law that is in relation to the *Road Safety Act 1986* a corresponding law or under a law of another country; or
 - (ii) held or had held such a licence but, at the time of the transport accident, it was suspended or had been cancelled; or
 - (iii) in the case of a transport accident occurring on or after the commencement of section 12 of the Transport Accident (Amendment) Act 2000, held or had held such a licence but, at the time of the transport accident, it had not been renewed for at least 3 years; or
 - (d) the person-
 - (i) was, at the time of the transport accident, the driver of or a passenger in a motor vehicle being used for or in connection with or in the commission of an indictable offence, stealing or attempting to steal a motor vehicle, resisting or preventing the lawful apprehension or detention of that

s.44 = Total loss of earnings, s.45 = Partial loss of earnings, s.47 = Impairment benefit, s.48

Impairment benefit where more than one accident involved, s.49 = Total loss of earning capacity, s.50 - Partial loss of earning capacity, s.51 = Loss of earning capacity-non-earners

person or any other person or intentionally causing or attempting to cause injury to that person or any other person; and

- ii) is convicted of that offence.
- (2) The Commission is not liable to pay compensation under section 44, 45, 47, 49, 50 or 51⁸ to a person who is injured in a transport accident if the person-
 - (a) was driving a motor vehicle at the time of the transport accident; and
 - (b) is convicted of an offence in relation to the transport accident under 49(1)(ba),(c),(ca),(d),(e),(ea) or (eb),56(2) or 56(7) of the *Road Safety Act* 1986 or under a law that is, in relation to that Act, a corresponding law.
- (3) The Commission is not liable to pay compensation under section 47, 49, 50 or 51 to a person who is injured in a transport accident if the person was driving a motor vehicle at the time of the transport accident and is convicted, in respect of driving the motor vehicle at that time-
 - (a) of an offence under section 49(1)(a) of the *Road Safety Act 1986* or under a law that is, in relation to that Act, a corresponding law; or
 - (b) of an offence under section 49(1)(b), 49(1)(f) or 49(1)(g) of the *Road Safety Act 1986* or under a law that is, in relation to that Act, a corresponding law and the relevant level of concentration of alcohol in the person's blood was 0×24 grams or more per 100 millilitres of blood or in the person's breath was 0×24 grams or more per 210 litres of exhaled air, as the case requires- unless the person satisfies the Commission that the intoxicating liquor or drug or the concentration of alcohol in the blood or breath, as the case may be, did not contribute in any way to the transport accident.
- (4) Subsection(5) applies if a person who is injured in a transport accident was driving a motor vehicle at the time of the transport accident and is convicted in respect of driving the motor vehicle at that time-
 - (a) of an offence under section 49(1)(b), 49(1)(f) or 49(1)(g) of the *Road Safety*Act 1986 or under a law that is in relation to that Act, a corresponding law; and
 - (b) the relevant level of concentration of alcohol in the person's blood was more than 0×05 grams per 100 millilitres of blood or in the person's breath was more than 0×05 grams per 210 litres of exhaled air, as the case requires.
- (4A) Subsection (5A) applies if a person who is injured in a transport accident was driving a motor vehicle at the time of the transport accident and is convicted in respect of driving the motor vehicle at the time of an offence under section

-

s.44 = Total loss of earnings, s.45 = Partial loss of earnings, s.47 = Impairment benefit, s.48
Impairment benefit where more than one accident involved, s.49 = Total loss of earning capacity, s.50 -Partial loss of earning capacity, s.51 = Loss of earning capacity-non-earners

- 49(1)(bb), (h) or (i) of the *Road Safety Act 1986* or under a law that is in relation to that Act a corresponding law.
- (5) The compensation under section 44 or 45 in respect of a person to whom subsection (4) applies-
 - (a) is reduced by one-third if the concentration was more than 0.05 and less than 0.12; and
 - (b) is reduced by two-thirds if the concentration was 0.12 or more and less than 0.24; and
 - (c) is not payable if the concentration was 0.24 or more- unless the person satisfies the Commission that the concentration of alcohol in the blood or breath of the person did not contribute in any way to the transport accident.
- (5A) The compensation under section 44 or 45 in respect of a person to whom subsection (4A) applies is reduced by one-third unless the person satisfies the Commission that the concentration of drugs in the blood of the person did not contribute in any way to the transport accident.
- (6) For the purposes of subsection (1), a person who drives a motor vehicle at a particular time is not to be deemed never to have held a licence to drive a motor vehicle of that class if at that time-
 - (a) the person was-
 - (i) the holder of a learner permit in respect of a motor vehicle of that class under the *Road Safety Act 1986* or under a law that is, in relation to that Act, a corresponding law; or
 - (ii) participating in a training program accredited under the *Road Safety Act* 1986; and
 - (b) in the case of a motor vehicle other than a motor cycle or a tractor, the person had a licensed driver (not being the holder of a licence issued on probation) sitting beside him or her.

Appendix 3.2

Drivers Licence Demerit Point Regime: Victoria, Australia

Demerit points are a form of penalty imposed when certain traffic offences are committed. Demerit points range from one to 10 points per offence.

When issued with a learner permit/driver licence motorists commence with zero demerit points. Demerit points accumulate for certain offences (refer table below). A fine may also be imposed together with demerit points. Demerit points are valid for three years from the date of the offence.

If a:

- full driver licence accumulates 12 or more demerit points in any 3 year period; or
- learner permit or probationary driver licence accumulates 5 or more demerit points in any 12 month period or 12 or more demerit points in any 3 year period,

there is formal notification from the Licensing Authority (VicRoads), with the following option notice

Option 1: Keep permit / licence, subject to future good behaviour

You can elect to keep your licence but you must not accumulate any other demerit points during a 12 month period specified on your option notice or your permit/licence will be suspended for double the time that it would have been suspended under option 2.

Option 2: Suspend permit / licence

If you choose option 2 you do not need to respond to the option notice. Your licence suspension will start on the date specified in this notice. The suspension period will be three months for the first 12 points (or 5 points if you have a learner permit or probationary licence) plus one month for every additional four points listed in the option notice.

Demerit Point Offences	No. of Points
Drink-drive offences in situations where the licence/permit has not been cancelled:	
 Drivers subject to zero blood alcohol concentration (BAC), with a BAC of less than .05. 	10
Drivers subject to .05 BAC, with a BAC of less than .07.	
Exceed speed limit by 45 km/h or more*	8
Exceed speed limit by 35 km/h or more but less than 45km/h*	6
 Exceed speed limit by 25 km/h or more but less than 35 km/h* Rail level crossing offences Drive fatigue regulated heavy vehicle in contravention of maximum work requirement - critical risk offence Drive fatigue regulated heavy vehicle in contravention of minimum rest requirement - critical risk offence 	4
 Exceed speed limit by 10 km/h or more but less than 25 km/h* Disobey traffic lights, signs or police directing traffic Fail to give way or stop Ride motorcycle without wearing a helmet or improperly carrying a 	3

	Demerit Point Offences	No. of Points
	pillion/sidecar passenger	ittor or r omes
•	Drive without wearing a seat belt, or a properly adjusted and fastened seat belt	
•	Drive with an unrestrained passenger	
•	Drive with a passenger in or on a part of a vehicle not designed for passengers	
•	Drive the wrong way on a one way service road	
•	Drive on the wrong side of double lines or a divided road	
•	Drive over double lines surrounding a painted island	
•	Risk colliding with alighting, boarding or waiting tram passengers	
•	Drive fatigue regulated heavy vehicle while impaired by fatigue	
•	Drive fatigue regulated heavy vehicle in contravention of maximum work requirement - severe risk offence	
•	Drive fatigue regulated heavy vehicle in contravention of minimum rest requirement - severe risk offence	
•	Drive contrary to a major defect notice	
•	Careless driving	
•	Use a mobile phone in a vehicle when prohibited from doing so	
•	Drive a probationary prohibited vehicle (probationary drivers)	
•	Fail to display P plates	
•	Disobey passenger restrictions (probationary drivers)	
•	Ride a motorcycle other than a learner approved motorcycle contrary to licence requirements	
•	Ride a motorcycle contrary to a pillion passenger condition	
•	Drive without a properly attached and/or displayed number plate	
•	Improper overtaking or passing	
•	Turn or stop without signalling	2
•	Turn improperly	2
•	Fail to keep left (situations other than double lines)	
•	Exceed speed limit by less than 10 km/h*	
•	Drive contrary to a minor defect notice	
•	Fail to dip headlights	1
•	Drive at night or in hazardous weather conditions without appropriate lights on	1
•	Follow too closely	
	Company of the compan	

^{*}Note - Some speeding offences also result in a licence suspension.

 $\underline{Source:}\ \underline{http://www.vicroads.vic.gov.au/Home/Licences/DemeritsAndOffences/DemeritPointsAndFines/DemeritPoints.htm}$

Appendix 4

Learner Approved Motorcycle Scheme (LAMS): Victoria, Australia



Wednesday, 4 June, 2008

NEW LICENSING REGULATIONS MAKE LEARNING TO RIDE SAFER

New regulations for Learner and Probationary motorcyclists are to come into effect on 1 July under the Brumby Government's new *Learner Approved Motorcycle Scheme (LAMS)*.

Parliamentary Secretary for Roads and Ports, Martin Pakula said the introduction of LAMS in Victoria will contribute to a more consistent approach to vehicle restrictions for learner and newly licensed riders.

"Under LAMS, learner and novice riders will have access to a range of motorcycles and scooters suitable for their level of experience," Mr Pakula said.

"Novice riders will only be permitted to ride motorcycles on the approved LAMS list which includes bikes with power-to-weight ratios not exceeding 150 kilowatts per tonne and engine capacities not exceeding 660cc.

"The scheme will also restrict learners from using high powered, race replica 250cc bikes that are known to be dangerous for inexperienced riders."

A list of acceptable motorcycle and scooter models that can be used by learner and novice riders is available on the VicRoads website and will be updated as suitable new models come onto the market.

Mr Pakula said the list of motorcycle and scooter models will keep new riders informed about which bikes they can ride.

"The expanded range will include bikes with better handling characteristics and some with advanced safety features like ABS and combined braking systems," Mr Pakula said.

"The new scheme, funded by the Motorcycle Safety Levy, provides a wider range of bikes for new riders to choose from based on bike performance and safety.

"The Motorcycle Safety Levy is essential to reduce the number of motorcyclists killed and injured each year.

"The Brumby Government continually works with the Victorian Motorcycle Advisory Council to direct funds raised through the Motorcycle Safety Levy back to a wide range of initiatives to improve motorcycle safety."

Mr Neil O'Keefe, Chair of the Victorian Motorcycle Advisory Council, welcomed the new scheme.

"I have been concerned that some new riders avoid practising on the smaller bikes and ride very powerful models before they are ready. LAMS provide much safer options for these riders," Mr O'Keefe said.

A list of approved motorcycles and scooters is available on the VicRoads website - www.vicroads.vic.gov.au/LAMS



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