Premium system transition for the proposed NSW Green Slip Scheme

Motor Accidents Authority of NSW

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Building a better working world

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1. Introduction

1.1 Scope

The Motor Accidents Authority of NSW (MAA), as part of the NSW Government reforms to the NSW Compulsory Third Party (CTP) Green Slip Insurance Scheme (the Scheme) as outlined in the Motor Accidents Injuries Amendment Bill 2013 (the Bill), has requested Ernst & Young (EY) to document the proposed operation and transition of the premium system.

The Bill gives the MAA greater powers to regulate the premium system under the proposed Scheme compared to the existing legislation. The purpose of this report is to document MAA's proposed operation of the premium system and transition mechanisms in implementing those powers. The mechanisms have been developed in conjunction with EY and this report is based on our consultations with the MAA and our understanding of MAA's agreed design to date.

This report does not cover the parameterisation of the proposed mechanisms which will be the subject of further development subsequent to the Bill being enacted.

EY is the Scheme Actuary.

In this report, reference to "transition period" refers to the period starting from the day chosen by the MAA (which can be before the commencement of the proposed Scheme) and ending three years after the commencement of the proposed Scheme. This definition is consistent with that in the Bill.

1.2 Premium objectives

In relation to premiums, the MAA's objectives are:

- Premiums should remain affordable for motorists
- Premiums should be relatively stable over time, i.e. avoid sudden increases or decreases for any particular segment of the market
- Premiums do not result in excessive profits or losses for insurers who privately underwrite these risks
- Premiums should reflect the true risk (i.e. claims costs) borne by cohorts of motorists subject to the above objectives.

There is inherent uncertainty in how the claims experience under the proposed Scheme will emerge and what the ultimate claims cost will be. Transition arrangements are required to protect stakeholders from being unintentionally adversely impacted.

There are several pricing mechanisms investigated by the MAA, which it has the power to enforce, both during and after the transition period in order to achieve the above objectives. These powers are conferred to the MAA under Schedule 1 [167] (Part 11, clauses 45 and 46) of the Bill.

It is important to recognise that there is an underlying conflict between the pricing objectives for a compulsory insurance product, namely that premiums should reflect the true risk borne by cohorts of motorists yet premiums should be affordable for each of these cohorts. There are premium system design elements, as discussed in this report that assist in providing a balance between these objectives.

It is also important to recognise that the premiums charged under the proposed Scheme do not necessarily equate to the estimated cost per policy of the proposed Scheme for a number of reasons:

- The premiums charged will allow for transitional matters that may result in a lower premium (e.g. the application of the unearned premium surplus to the benefit of policyholders, discussed in Section 5)
- The premium guidance provided by the MAA may allow for expected lower volume of claims initially as at-fault claimants are less aware of their eligibility for benefits, which may result in a lower premium initially (i.e. the 'honeymoon' effect, discussed in Section 3)
- There may be other factors that the MAA will take into account in guiding insurer premiums during the first few years of the proposed Scheme.

We refer readers to the separate EY report titled "Estimated cost per policy of the proposed NSW Green Slip Scheme" and dated 29 July 2013 for more information regarding the estimated costing of the proposed Scheme (EY Costing Report).

1.3 Premium and transition mechanisms

The premium and transition mechanisms refer to ways in which the MAA, as the regulator, can guide or direct the prices of the industry. Some of the mechanisms are required as part of the transition from the existing Scheme to the proposed Scheme whilst some of the mechanisms are expected to be an ongoing feature of the proposed Scheme.

The mechanisms discussed in this report are:

- Guiding insurers' premiums (within a range) during the transition period (Section 3)
- Profit normalisation – used to ensure insurers' realised profit or loss is not excessive (Section 4)
- Application of unearned premium surplus to the benefit of vehicle owners – to remove a potential source of excessive profits by insurers as a result of implementing the proposed Scheme (Section 5)
- Premium relativities – used to determine the base premium for each vehicle class and district (Section 6)
- Risk equalisation – used to encourage more competition between insurers and sustain ongoing cross subsidies for some vehicle classes/districts to achieve affordable and relatively stable premiums over time (Section 7)
- Sharing of claims cost between insurers – to minimise the claims management friction costs as a result of the proposed first party Scheme (i.e. the insurer managing the claim of their policyholder may not necessarily be the insurer of the at-fault vehicle ultimately bearing the cost of the claim) (Section 8)
- Restrictions on insurers' expenses (Section 9).

For some of the above mechanisms, there will be gradual adjustments to the operation of the mechanisms to smooth out their impact on premiums over time. The purpose, principles, operation and transition for each of the mechanisms are detailed in the following sections.

The likely impact on premiums as a result of the proposed Scheme changes and the above premium and transition mechanisms are discussed in Section 10 of this report.

1.4 Reliance and limitations

In investigating the pricing transition mechanisms, we have relied on communications with, and data provided to us by, the MAA and the Roads and Maritime Services (RMS). We have also relied on discussions with insurers as part of the Scheme reform consultation process.

This report is only intended to document at a high level the structure of the proposed premium system transition mechanisms, not the detailed operation or the parameterisation of the mechanisms.

It is essential that any reader of this Report understand its associated qualifications and limitations. These are described throughout this report; however the most important are outlined in Section 11.

Judgements regarding the contents of this report should be made only after studying the entire report, as conclusions reached by a review of a section or sections on an isolated basis may be incorrect.

2. Current premium system

2.1 Background

Under the proposed Scheme, the basic *structure* of the current premium system and rate filing process as described in this section will be retained. For this reason, it is important to understand the operation of the current premium system. The premium transition mechanisms described in Sections 3 to 9 represent changes to the *parameterisation* of existing mechanisms or the implementation of additional mechanisms.

The current NSW CTP system is enacted through the Motor Accidents Compensation Act 1999 (MACA 1999). It operates as a privately underwritten compulsory third party (CTP) personal injury insurance scheme overseen by the MAA. CTP policies are only available from private insurers licensed by the MAA. There are currently seven licensed insurers in the market managed by five insurance companies – NRMA, QBE, Allianz (Allianz and CIC-Allianz), Zurich and Suncorp (AAMI and GIO).

The current premium system is a hybrid system of risk rating and community rating.

Whilst insurers under the current Scheme have some flexibility to set their own premiums within the guidelines set by the MAA (the Premium Determination Guidelines (PDGs)), the hybrid system enforces some level of cross subsidisation of premiums across certain cohorts of motorists.

Cross subsidisation occurs when members of a lower risk group pay a higher premium than required to subsidise the premiums of members of a higher risk group who pay a lower premium than required. An example of this is a 56 year older driver paying slightly more than required to subsidise the premium of a 17 year old driver. This pooling of risk serves to ensure that the higher risk drivers' premiums are more affordable.

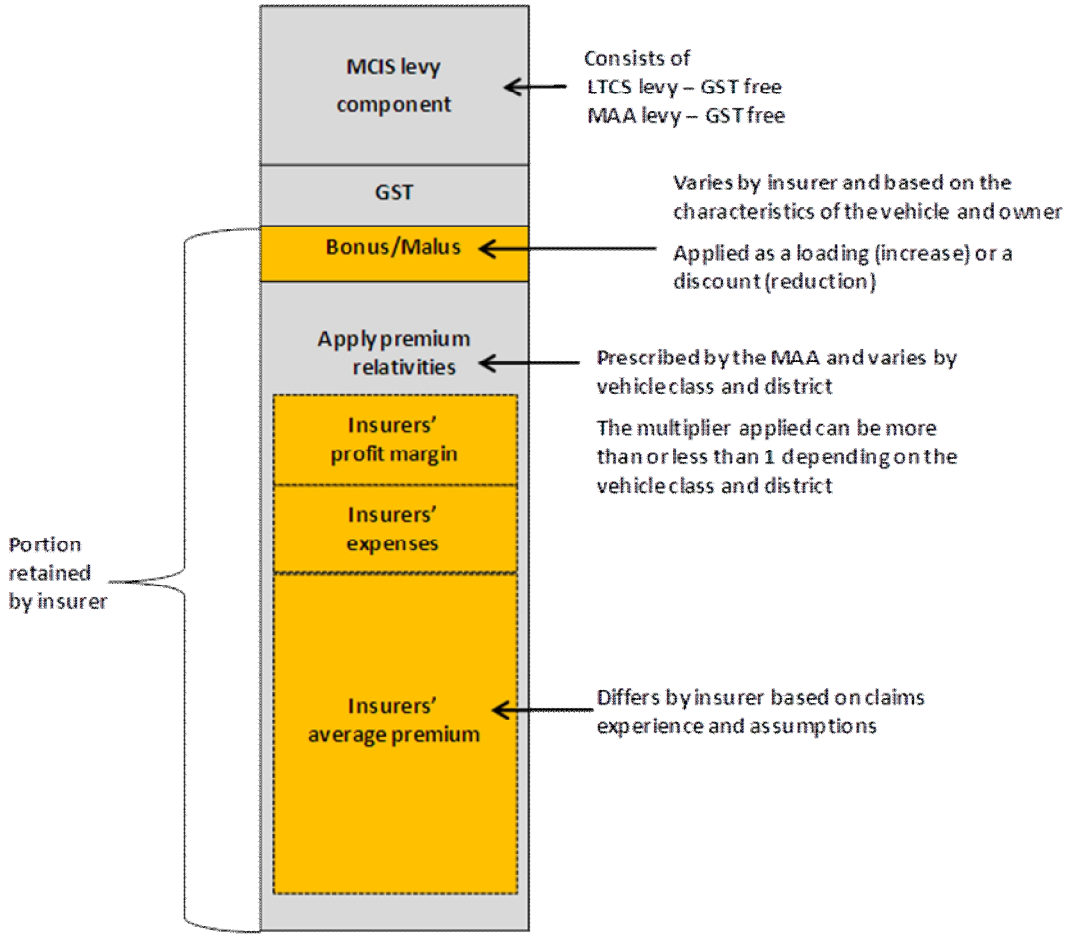
Ultimately, premiums in the market vary by insurers, vehicle class and districts and rating factors.

2.2 Components of the premium system

The build up of the premium paid by consumers is depicted in the figure below. It shows the premium consists of:

- Insurers' expected average claims costs
- Loadings for insurer expenses and profit margin
- Application of prescribed premium relativities to determine the relevant premium for each vehicle class and district
- Bonus/malus which is a loading (malus) or discount (bonus) applied to an individual policy depending on its risk characteristics (excluding vehicle class/district)
- Medical Care and Injury Services levy (MCIS levy)
- GST applied to insurers' base premium but not to the MCIS levy.

Figure 1: NSW CTP Green slip premium components



2.2.1 Insurers' average premium and expense and profit loadings

Each insurer makes their own estimate of claims costs based on their own past experience and judgement regarding future claims experience. Each insurer's own mix of business (e.g. whether they have a higher proportion of high risk vehicle owners compared to other insurers) will also affect their own views of claims experience.

Insurers also determine their own loadings for expenses and profit based on their individual business circumstances.

Insurers' estimate of claims costs, expenses and profit are submitted to the MAA as part of the rate filing review process (discussed later in Section 2.3). As the regulator, the MAA has a role within the powers defined in the Act in affirming that premiums are fully funded (i.e. adequate), not excessive and that the components of the premium are justified by the insurer.

2.2.2 Premium relativities

Premium relativities are estimates of claims cost per vehicle class/district relative to the claims cost of a Class 1 (Sydney) Metro vehicle. The MAA publishes the premium relativities to be applied by insurers, which are determined with the assistance of MAA's actuarial advisor and using claims data provided by all insurers and exposure data from RMS.

A table of the current relativities is shown in Appendix A.

The table of relativities shows that under the current Scheme, a passenger vehicle in the Sydney metropolitan district will have a higher premium (before the application of

bonus/malus) than a passenger vehicle in the country district. This difference is based on the relative claims cost of injuries caused by passenger vehicles in the metropolitan district compared to passenger vehicles in the country district.

These relativities are applied to the Class 1 Metro premium rate set by each insurer to determine the base premium before bonus/malus for a given vehicle class and district.

2.2.3 Bonus/malus

The MAA permits insurers to apply a discount or loading to the base premium, known as a bonus or a malus, based on objective risk rating factors. The rating factors adopted require pre-approval from the MAA and rating factors based on geographical area, race and input tax credit (ITC) entitlement are not permitted by the MAA.

Insurers each set their own bonus/malus percentages based on their assessment of risks (e.g. driver age, vehicle age) and their own claims experience.

However the extent of the bonus/malus is limited by the application of the "elastic gap" which is documented in the PDGs. The maximum loading that can apply for all vehicles relative to the insurers' base rate is determined by the reference high rate. The maximum loading or malus varies by insurer (from the application of the elastic gap). The maximum loading has also varied over time and reflects the changes in the reference high rate made by the MAA. Currently, the maximum malus ranges from around 20% to 30% depending on the insurer.

The maximum discount that insurers can apply to a CTP policy for a vehicle owner (and/or youngest driver) aged 54 or under is a 15% discount from the individual insurers' base rate for the class of vehicle and district; for those aged over 55 the limit is a 25% discount.

The application of this bonus/malus structure results in some degree of cross-subsidisation of the higher risk vehicles by lower risk vehicles in order to help maintain the affordability of premiums to all vehicle owners.

2.2.4 Medical Care and Injury Services levy (MCIS levy)

The MCIS levy consists of two components, the MAA and the Lifetime Care and Support (LTCS) component.

The MAA component funds the cost of public hospital and ambulance services for traffic accident victims regardless of fault, the cost of running the MAA and costs incurred by RMS in relation to the CTP scheme. The MAA component is currently a flat percentage, 9.5%, for all vehicles. The structure and percentage of this levy has varied over time.

The LTCS component covers the costs of providing lifetime care and support to individuals catastrophically injured in an accident, regardless of fault and the cost of running the Lifetime Care and Support Authority (LTCSA). The LTCS component is risk rated, i.e. it differs by vehicle class and district. A table of the current LTCS levies is shown in Appendix B.

The MCIS levy is GST free.

2.3 Rate filing process

2.3.1 Premium Determination Guidelines (PDGs)

Any changes to the premium must be submitted to the regulator for compliance assessment before it can become effective. However licensed insurers may file new premiums at any time.

Insurers are also required to file with the MAA a full set of the CTP premiums it proposes to charge at least once each year or as determined by the MAA.

Under Part 2.3 of Chapter 2 of MACA 1999, the MAA has the power to issue PDGs for the determination of CTP premiums.

The PDGs:

a) Specify the manner in which premiums are to be determined and the factors to be taken into account in determining premiums – e.g. breakdown by claim frequency, claim size, separate consideration of Accident Notification Forms (ANFs) from full claims, expenses, profit margin, use of published premium relativities, restrictions on bonus/malus, application of ITC loadings

b) Require licensed insurers to specify how they have determined premiums – e.g. requiring insurers to supply justification of how assumptions have been derived

c) Specify the nature of the additional information and reports that the MAA may require licensed insurers to furnish with the premiums they file or to justify premiums they have filed (including with respect to estimated investment earnings, the verification of assumptions, estimated profit, capital allocation to third-party insurance business and other relevant matters).

Additionally, the PDGs specify that an insurer must obtain an actuarial certificate from an actuary not in the employ of the insurer, to confirm that proposed premiums are fully funded, i.e. that premiums are sufficient to cover the central estimate of claims costs, expenses and an appropriate profit margin to provide an adequate return on an insurer's capital.

2.3.2 MAA's role in the process

As the regulator, the MAA assesses all rate filings submitted and may seek assistance from the Scheme Actuary in the review process. The MAA has the power to reject the rate filing under specific circumstances, these being:

(a) The premium will not fully fund the present and likely future claim liability of the licensed insurer concerned, or

(b) The premium is, having regard to actuarial advice and to other relevant financial information available to the Authority, excessive, or

(c) The premium does not conform to MAA Premiums Determination Guidelines, or

(d) The commission payable to the insurer's agent(s) exceeds 5% of the premium.

The MAA has to make a decision whether to reject a rate filing within six weeks of the premium being filed.

3. Pricing Mechanism – Guiding insurers' premiums

3.1 Purpose

MAA has the power to guide premiums charged by insurers (within a range) during the transition period under Schedule 1, Part 11, clauses 45 and 46 of the Bill. This is critical because there are a number of areas of uncertainty as a result of the proposed Scheme. The areas of uncertainty are discussed in the EY Costing Report but the key ones include:

a) Estimated costs of the proposed Scheme rely on many assumptions and a view of likely future exposures and claimant behaviours, including insurers' claim management, that may or may not emerge as expected particularly as details to be set out in MAA claims guidelines will be developed subsequent to the Bill being enacted

b) Where there are extensive reforms to enable premium reductions, it is normal for insurers' premiums to include a level of conservatism to mitigate against the uncertainty around the estimated cost of the proposed Scheme. This means that claims costs may emerge better than originally priced. It occurred in past NSW CTP reforms e.g. 1999 where it was assumed that the reforms would not be fully effective

c) Immediately after implementation, there may be an initial period of low claim activity as people are unaware of their benefit entitlements (e.g. the introduction of compensation for at-fault claims).

Given the above, there is a possibility that market-determined premiums may be set higher than required leading to excessive profits for insurers. In particular, b) and c) may give rise to a "honeymoon" effect.

Consequently MAA can guide the insurers' premiums (within a range) over the transition period (Schedule 1 [167] (Part 11, clause 46 1(d)) of the Bill). This guidance can include insurers' average premiums and application of their bonus/malus. The aim is to compel insurers to factor in the honeymoon effect when setting premiums and limit the buffers that insurers may wish to include. Conversely, if there is strong evidence that guided premiums are inadequate, the MAA can guide prices upwards for the prudential operation of the industry. Overall, this will minimise the potential for excessive profits or losses for insurers and provide greater stability of premiums.

3.2 Principles

In designing such a mechanism, the MAA seeks to target the following principles:

- The price guidance set by the MAA should not be overly conservative or optimistic, i.e. it should allow insurers to fully cover the cost of claims and reasonable expenses required to operate in the proposed Scheme

- The price guidance set by the MAA should target a normal level of economic profit for insurers, to provide an adequate return on insurers' capital

- The expected impact of any honeymoon effect, acting as a temporary reduction in claims costs during the early years of the proposed Scheme, should be factored into the MAA's price guidance. This will be set with the assistance of the Scheme's actuarial advisor.

- Where the MAA price guidance is estimated to result in a premium surplus (or deficit), this will be returned to (or recovered from) motorists through adjustments to the price guidance at the following underwriting period (subject to premium stability objectives).

3.3 Operation

For insurers' rate filings under the proposed Scheme, the MAA will determine the range within which insurers' average premium must be set and any constraints in relation to the application of bonus/malus. The MAA will communicate these requirements to insurers well before the submission date for insurers' rate filings.

The range will be revised regularly (e.g. annually) based on the emerging claims experience under the proposed Scheme and changes in other economic variables (e.g. inflation and discount rates).

There is a precedent for such a transition mechanism. When MACA 1999 was introduced, it included a provision for the MAA to reject an insurer's premium filing where the MAA was not satisfied that the majority of the insurer's Class 1 Metro policyholders received a premium below a specified amount. The specified amount was determined with reference to the agreed costing of the Scheme (and pro-rated for policies still in force).

3.4 Transition

This mechanism is purely for transition purposes. It is expected that it will be in force during the transition period, as per powers conferred by the Bill.

4. Pricing mechanism – Profit normalisation

4.1 Purpose

As mentioned in Section 3.1 above, there are significant uncertainties which may lead to profits or losses for insurers different to the profit margin filed by insurers.

Even though the MAA can initially guide premiums in the transition period, it may take many more years for the level of insurers' profits (or losses) to be known with certainty for those underwriting years.

The purpose of a profit normalisation mechanism is to protect motorists (from excessive profit made by insurers) while ensuring the industry is not adversely impacted by excessive losses beyond a threshold as a result of the proposed Scheme.

4.1.1 How profit is determined by insurers

Profit is the residual of premium plus investment income earned by insurers after deducting claim payments and insurers' expenses. The waterfall charts below illustrate scenarios of when profit or loss is made.

Figure 2: Scenario where an insurer makes a profit

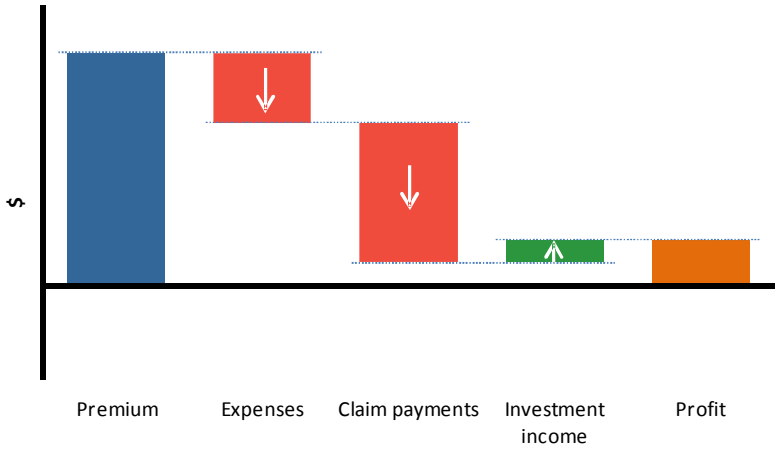


Figure 3: Scenario where an insurer makes a loss

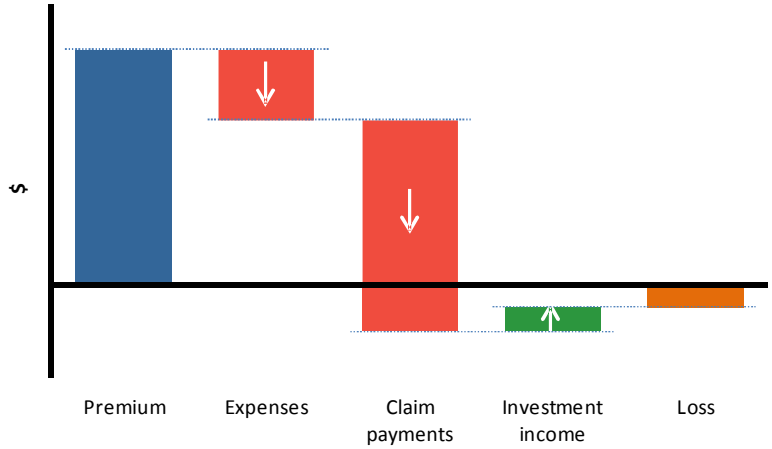


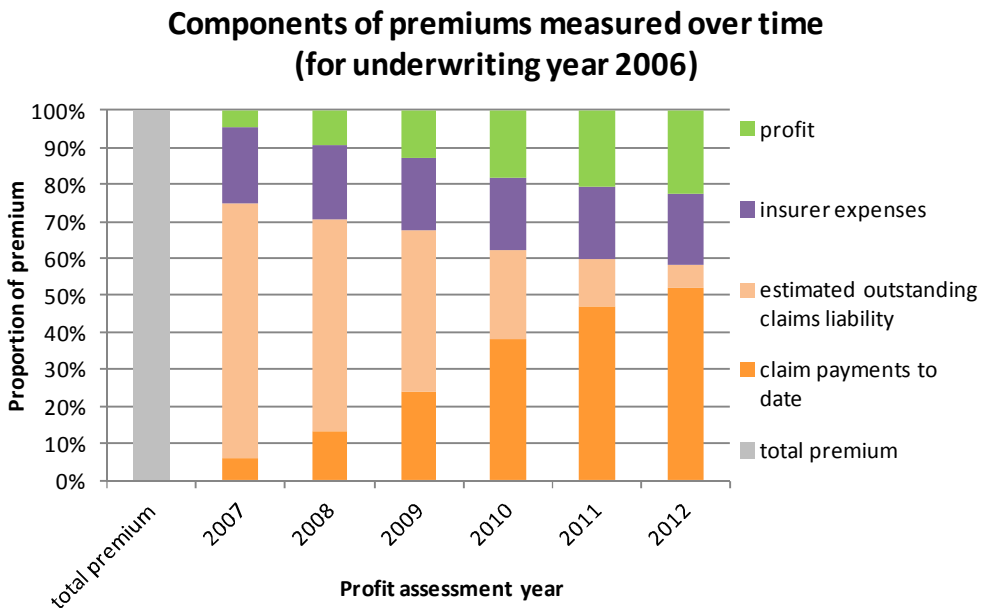
Figure 2 illustrates where an insurer's expenses and claims costs are less than the premium collected and investment income earned, the residual represents profit for the insurer.

Figure 3 illustrates where an insurer's expenses and claims costs exceed the premium collected and investment income earned, then the insurer makes a loss.

The estimation of profit is complicated by the fact that CTP claims can take a number of years to settle, being based on medical and legal outcomes and court precedents. It can be many years before the profit earned on a policy can be known with any certainty. Assessment of profit (especially for the more recent underwriting periods) is largely based on models and assumptions on expected claims experience. Actual claim outcomes can emerge materially differently to that estimated. As actual claims experience gradually replace the estimates from the models over time, the hindsight assessment of profit can change as a result.

The following chart illustrates the portion of claims costs that is known (claim payments to date) and the portion of claims costs that are estimated (estimated outstanding claims liability) for the industry in respect of the underwriting year 2006.

Figures 4: Development in claims costs and profit over time



The chart above illustrates that the year after the policies have been written (i.e. 2007), the majority of claims costs is estimated. Over time, as claim payments are made and it becomes apparent that the claims experience is more favourable than expected, a greater proportion of the premium is recognised as profit.

The chart also highlights that even at seven years after the policies have been written (i.e. 2012), there is still a proportion of claims costs that requires estimation.

4.1.2 Past profit experience for the industry

The profitability for the industry has varied over time. The estimated profitability for the NSW CTP Scheme for underwriting years 1 October 1999 to 30 September 2011, measured as at 30 June 2012 is shown in the following table.

Table 1: Estimate of profitability of past NSW CTP premiums

Underwriting year ended 30 September	Profit
2000	30%
2001	28%
2002	30%
2003	24%
2004	27%
2005	23%
2006	22%
2007	18%
2008	9%
2009	5%
2010	12%
2011	12%

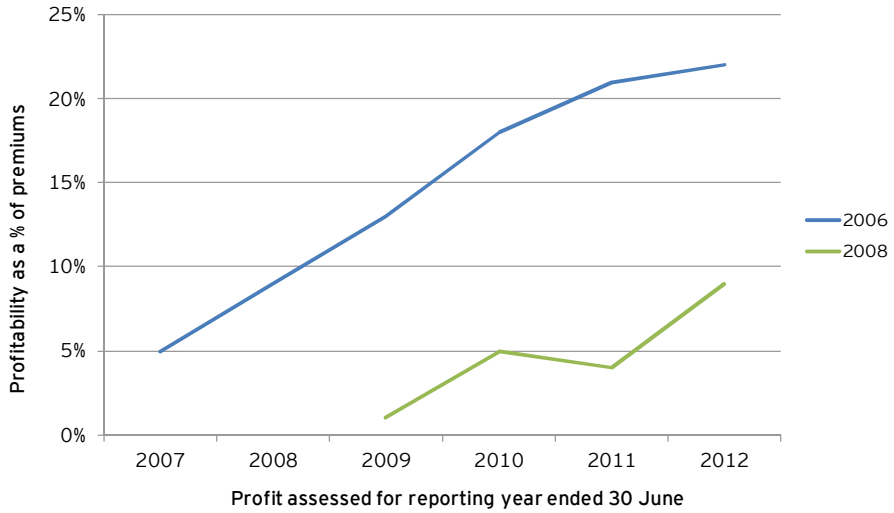
Sourced from 2011/12 MAA Annual Report

The table above illustrates how (hindsight) profitability has varied over time. The high profitability in the early underwriting years reflect how the claims experience immediately after the Scheme reforms implemented in 1999 emerged significantly better than expected. Prior to the Scheme reforms, insurers' profitability during underwriting years 1989 to 1999 was as low as a loss of 33%[1].

It is important to note that under the current Scheme legislation, insurers' are not able to make up for lower than expected past profits by increasing the profit margin in subsequent premium rate filings. By the same token, the MAA does not have the powers under the current Scheme to address higher than expected past profits made by insurers. Filed premiums must be adequate (yet not excessive) independently of previous premium periods.

Figure 5 below illustrates the changes in the hindsight assessment of profit for the industry. It shows the reported estimate of the NSW CTP industry profit for the underwriting years ended 30 September 2006 and 30 September 2008 (i.e. for policies written in the year to 30 September 2006 and 30 September 2008) from 2007 to 2012.

Figure 5: History of CTP profitability for underwriting year ended 30 September 2006 and 30 September 2008



[1] Source: MAA Annual report 2006-2007

The figure above shows that the industry profit for underwriting year ended 30 September 2006 was initially estimated to be 5% in 2007 and gradually increased to 22% in 2012. Similarly, the industry profit for underwriting year ended 30 September 2008 was estimated to be 1% in 2009. It increased to 5% in the following year, reduced to 4% in 2011 and increased to 9% in 2012. This shows that the estimate of profitability can change materially over time as claims settle and their costs become known with certainty. Therefore a mechanism is required to assess the industry's profit several years after the policy is written.

4.2 Principles

In designing a profit normalisation mechanism, the MAA seeks to target the following principles:

- This is a two way test – it applies to both excessive profits or excessive losses
- Profit normalisation should have a neutral impact on market dynamics, i.e. not advantage or disadvantage any single insurer
  - It is essential that insurers have some incentive to improve management of claims, reduce expenses and file for competitive premiums
  - The profitability of an insurer relative to its competitors should remain unchanged
  - The mechanism must limit the ability of insurers to game the system at the expense of other insurers
- Assessment of profitability should be conducted at an industry level, i.e. it should not nullify competitive differences between individual insurers' performance arising from:
  - Operational efficiency (and hence expenses)
  - Ability to select better risks within vehicle class and district
  - Claims management effectiveness
  - Volatility of claims experience, e.g. presence or absence of large claims
- Assessment of industry profitability should be conducted by the Scheme Actuary, who already assesses the historical profitability of the industry
- The mechanism must be simple and have a low cost of implementation
- Profitability is assessed, and hence the profit normalisation mechanism is applied, *after* taking into account any premium subsidies paid or received by an insurer due to the risk equalisation mechanism. The risk equalisation mechanism is discussed in Section 7.

4.3 Operation

In practice, insurers should be given incentives to improve their efficiency and effectiveness by retaining their potential to earn more profit. As such, profit normalisation should be a mechanism that is triggered when industry profit is considered "excessive" or when industry losses exceed a threshold (given that the potential for making a loss is a fundamental risk of writing insurance).

The profit normalisation mechanism will be applied to policies written during the transition period. Profitability of these policies will be assessed for a pre-determined number of

accounting years (e.g. assessed for seven accounting years from 2014 to 2020). There needs to be a balance between accuracy of claims liability measurement and practicality of measurement timeframe for insurers.

If the MAA determines that there is an excessive profit or loss, based on advice from the Scheme Actuary, the MAA will require the PDGs to set out the amount insurers are to reduce/increase future premiums. The PDGs will be revised on a regular basis to take into account revisions to the assessed profit/loss each year.

The likelihood of the mechanism being triggered is influenced by the gap between the threshold of excessive profit and threshold of excessive loss. The gap should be sufficiently wide to encourage ongoing operational improvement by insurers.

4.4 Transition

The profit normalisation mechanism is expected to be temporary mechanism.

The profit normalisation mechanism will be applied to the three underwriting years immediately following the commencement of the proposed Scheme. However, given the number of years before the actual claims experience is known with more certainty, it is anticipated that each underwriting year will be assessed for profit normalisation for up to seven years after the policies are written.

5. Pricing mechanism – Unearned premium surplus

5.1 Purpose

Unearned premium is the portion of premiums written that relates to the unexpired portion of the policy term.

At the time the proposed Scheme commences, insurers will be holding unearned premiums on policies which have been priced on the current Scheme benefit design basis, yet insurers will be providing benefits on the (lower) proposed Scheme cost basis for the remaining policy term.

Unearned premium surplus is the extent to which the unearned premiums exceed the lower proposed Scheme cost basis.

If no adjustment is made then insurers will make additional profits from the unearned premium. Therefore a mechanism is required to identify and ring-fence the unearned premium surplus and apply the surplus to the benefit of policyholders, such that savings arising from CTP Scheme benefit design reform are ultimately passed on to vehicle owners.

5.2 Principles

Policies written up to twelve months prior to the commencement of the proposed Scheme will generate an unearned premium surplus.

The anticipated annual savings on premiums as a result of the benefit reform should apply proportionally to policies already written prior to the introduction of the proposed Scheme.

5.3 Operation

The unearned premium surplus will be determined objectively with reference to the savings anticipated on the proposed Scheme (based on the Scheme costing and premiums set by the MAA in the first year of the operation of the proposed Scheme). The surplus will be applied to the benefit of policyholders, e.g. in the form of an offset to insurers' costs as a result of implementing the proposed Scheme or as an explicit reduction in premiums charged by insurers.

The PDGs will detail how the amount will be determined, how it will be implemented by insurers and the underwriting period over which this surplus will be applied.

There are precedents for such a mechanism such as when the existing Scheme came into force in 1999 and when the Lifetime Care and Support Scheme was implemented from 2006.

Under Schedule 1, Part 11, clause 46 1(a) of the Bill, the MAA has similar powers to ensure that unearned premium surplus is returned through an appropriate reduction in premiums payable for policies issued during the transition period.

Measurement of insurers' profit and allowable premiums will be before the application of the unearned premium surplus.

5.4 Transition

The distribution of unearned premium surplus will only apply during the transition period.

6. Pricing mechanism – Premium relativities

6.1 Purpose

The premium relativities published by the MAA determine how much vehicles owners in each vehicle class and district pay relative to a passenger vehicle garaged in the Sydney metropolitan district (before the application of any bonus/malus). The vehicle class and districts are prescribed by the MAA.

A move to a no-fault scheme will result in a significant change in relativities for some vehicle class/districts. For example, motorcyclists and drivers in the country are more likely to be involved in single vehicle accidents. Such accidents are not covered (beyond Accident Notification Form benefits) under the existing Scheme but will be covered under the proposed Scheme. Correspondingly, the premium relativities for these segments will need to be adjusted to reflect these benefit changes.

However, the MAA has power to restrict relativities to ensure premiums for specific vehicle classes/districts remain affordable.

Changes in the premium relativities do not affect the total premium pool for the CTP scheme. However, they can affect the premium rates charged by insurers for particular vehicle classes and districts, including Class 1 Metro. The effects of changes in relativities on individual insurers will vary due to differences in their mix of business by vehicle class and district.

6.2 Principles

In designing the new premium relativities, the MAA seeks to target the following principles:

- Premium relativities should reflect the "true" cost of claims for each vehicle class and district, i.e. no intentional cross subsidy across vehicle classes and district. However this is subject to premium affordability and ensuring stability in premiums over time.

- Premium relativities are to be set on the basis of fault, i.e. claims costs are allocated to the vehicle class/district of vehicle most at-fault regardless of the vehicle class/district of other vehicles involved in the same traffic accident. This means vehicle class/districts giving rise to a greater portion of total claims costs will pay a greater portion of premium.

6.3 Operation

A new set of relativities reflecting the proposed Scheme benefits will be published by the MAA (with assistance from the Scheme Actuary). The use of the published relativities by insurers to determine premiums will be unchanged from the current process.

In the background, a separate mechanism – sharing of claims costs between insurers – will operate. This to address the practicalities associated with determining premium relativities on the basis of fault, yet claims are managed by the first party insurer. This is discussed in Section 8.

6.4 Transition

To prevent a sudden and potentially significant change in premium occurring, small changes to the relativities will be implemented gradually over a number of years (e.g. over five years) to ultimately reach their "true" levels. This means that premiums will gradually reflect the true claims costs under the proposed Scheme (subject to affordability constraints and stability in premiums).

For some segments of the market, e.g. motorcyclists, it is expected that premiums based on "true" relativities will be considered unaffordable due to the significant increase in benefit coverage for at-fault drivers to be provided under the proposed Scheme. For such segments of the market, the relativities will continue to be capped beyond the transition period for some segments, to ensure premiums remain affordable. However, insurers writing these segments will be compensated through the risk equalisation mechanism (discussed in the next section) to provide insurers with greater incentive to compete in these segments.

7. Pricing mechanism – Risk equalisation

7.1 Purpose

This mechanism operates in conjunction with the premium relativities. It is recognised that the premium relativities published by the MAA will be capped for certain vehicle class/districts (e.g. motorcycles) in order achieve premium affordability and stable premiums over time. However, this may have adverse impact on market dynamics including:

- Insurers may avoid underwriting such segments where the premiums are considered inadequate
- Insurers currently writing a large proportion of higher risk policies which end up with capped relativities under the proposed Scheme will be unfairly disadvantaged and will have significantly reduced profits relative to other insurers

  Conversely, insurers writing a large proportion of lower risk policies which do not end up with capped relativities will be unfairly advantaged and will have increased profits relative to other insurers.

If a risk equalisation mechanism was not introduced, the above situations could result in a disorderly insurance market including negatively impacting on competitive market forces.

A risk equalisation mechanism addresses these issues by collecting a small amount from a large number of policyholders to fund the cross subsidy for a small number of policyholders (e.g. motorcyclists).

By providing premium subsidies to insurers who write business in one of the capped premium relativity classes, this mechanism:

- In the short term, can be used to gradually transition the relativities due to the move from third party to first party benefits, otherwise there may be sudden changes in premiums for certain segments of the market
- In the long term, helps improve competition in the market by:
  - Reducing the incentive for insurers to avoid "poor" risks, e.g. motorcycles
  - Improving competition for other risks by reducing the extent of cross subsidies to be managed under other constraints, e.g. bonus/malus, on insurers' pricing.

This mechanism operates in the background. Although it is not visible to premium paying vehicle owners, this mechanism enables the premium relativities for certain vehicle class/districts to be capped.

7.2 Principles

In designing the risk equalisation mechanism, the MAA seeks to target the following principles:

- The amount of subsidy collected by an insurer or received by an insurer depends purely on the risks written. This means that it is not dependent on the claims outcome (e.g. the absence or presence of adverse claims, the effectiveness of claims management) which provides insurers incentive to competitively price risks and operate efficiently in the segment

- The extent of the risk equalisation amount is determined at an industry level. All insurers will collect (or receive) the same prescribed dollar amount for a given vehicle class/district. This means that no individual insurer will be advantaged or disadvantaged by the mechanism and the relative competitive advantage (e.g. different claims management effectiveness, different expense levels, different profit levels) between insurers is maintained. It encourages insurers to be competitive.

7.3 Operation

Operation of the risk equalisation mechanism will be addressed in the PDGs.

The MAA will prescribe the dollar loadings and subsidies (positive or negative) for each vehicle class/district. This will be based on the difference between:

- The premium relativities published by the MAA, used by insurers to set the premiums charged for each vehicle class/district

- The "true" set of premium relativities reflecting the true cost of claims before it is constrained (i.e. a cap or floor is applied to the premium relativities) due to affordability considerations.

The net loading/subsidy will vary by vehicle class and district and will be subject to periodic review and adjustment.

The net contribution paid/funding received by each insurer will be managed via a clearinghouse approach on a quarterly basis. Such a mechanism is already in place to manage the net transfer of funds under the sharing agreement between insurers under the current Scheme.

7.4 Transition

There are two types of risk equalisation:

1) "Temporary" type – to apply during the transition period

   This will create temporary cross subsidies to help manage the gradual changes in premium relativities by vehicle class/district as a result of moving to a no-fault scheme.

2) "Ongoing" type – to apply during and after the transition period

   This will result in ongoing cross subsidies for certain vehicle class/districts or risks within vehicle class/districts after the transition period, where premium affordability cannot be achieved if the true costs of claims were allowed to be reflected in premiums charged.

We understand that MAA's objective is to maintain premiums for motorcycle owners (as a cohort) at current levels with future increases in line with overall average increases in premiums for all policies. This will require ongoing risk equalisation for motorcycles beyond the transition period.

8. Sharing of claims costs between insurers

8.1 Background

In the current Scheme, where there is more than one vehicle involved in an accident, the insurer of the most at-fault vehicle manages all claims arising from the accident.

A sharing agreement is in place between insurers in order to reduce disputes between insurers regarding who is the at-fault vehicle by requiring all insurers of vehicles involved in an accident to share in specific portions of the claims costs.

In the proposed Scheme, each insurer will manage the claims arising from the occupants of the vehicle they insure. However, the costs are ultimately borne by the insurer of the at-fault vehicle. Under Schedule 1 [68] (Part 3A.11, clause 65ZZO) of the Bill, an insurer who pays statutory benefits in respect of the death of or injury to a person is entitled to recover the amount of statutory benefits paid from the insurer of the at-fault vehicle. Under Schedule 1 [95] (Part 4.1A, clause 79A, 2(g)), the relevant insurer is entitled to be reimbursed by the insurer of the at-fault vehicle for any amount paid by the relevant insurer as damages in respect of the claim.

This introduces a "principal-agent" relationship whereby insurers are required to manage claims where they are not legally liable for the cost of those claims.

Sharing of claims costs between insurers balances the principle of allocating claims costs on the basis of fault (i.e. risk) for the purpose of setting the premium relativities, with the practicality of insurers being required to manage claims where they are not legally liable for the cost of those claims.

It is not, in isolation, a pricing or transition mechanism used by the MAA to direct market premiums but it enables the better functioning of the other mechanisms.

8.2 Purpose

Ideally, the insurer of the at-fault vehicle should be liable for all associated claims costs however, the purpose of the sharing agreement between insurers is to:

- Create a financial incentive for insurers to manage claims effectively by requiring them to share in the cost of claims they manage, even though they are not the insurer of the at-fault vehicle
- Simplifying the claimant experience such that claimants needs are met promptly
- Reduce disputes between insurers regarding who is the at-fault vehicle by requiring all insurers of vehicles involved in an accident to share in a portion of the claims costs.

Ultimately, the sharing agreement is aimed at reducing friction costs (e.g. poor claims management, disputes) associated with managing claims which should in turn have a positive impact on premiums and claimant experience.

8.3 Principles

In designing a sharing arrangement between insurers, the MAA seeks to target the following principles which are in conflict:

- Where the insurer managing the claim is not the insurer of the at-fault vehicle, they should have an incentive to promote an efficient claims outcome by sharing in the financial outcome

- At the same time, insurers prefer not having too much of their claim liabilities managed by other insurers.

8.4 Operation

A sharing agreement already exists in respect of the current Scheme since the commencement of MACA 1999.

The sharing agreement for the proposed Scheme will operate along similar lines to the existing agreement which is via an industry deed executed by the MAA and licensed insurers.

There are specific circumstances detailed in the industry deed which determine whether a claim is shared or not (e.g. benefits paid to the driver of the at-fault vehicle are not shared but fully retained by the insurer of the at-fault vehicle) and how much to be shared by which insurers.

The mechanism operates in the background between insurers.

8.5 Transition

A new industry deed will be agreed and effective from the commencement of the proposed Scheme. No other transition is required.

9. Pricing mechanism – Insurers' expenses

9.1 Purpose

Premium filing by insurers are required to meet the "fully funded test" to ensure that premiums are adequate and thereby guard the financial viability of the scheme.

MAA recognises that under the current fully funded test, insurers are able to include in their premium filings all expenses that can be demonstrably attributed to the CTP policies underwritten (based on actual expenses incurred in the past). There is a significant amount of judgement exercised by insurers in allocating expenses, particularly overhead expenses, between their various insurance products including CTP. The MAA has noted wide variations, between insurers, and over time, in the resulting level of expense loadings filed by insurers.

To encourage ongoing innovation and improvements in efficiency, Schedule 1 [30] (Section 27 (9)) of the Bill gives increased powers to the MAA to restrain the expense loadings included by insurers in premium filings within the fully funded test. This includes the MAA (via the PDGs) being able to:

- Specify the factors to be taken into account in determining the reasonable cost of claims and reasonable claim settlement expenses
- Exclude specified costs and expenses from being taken into account as costs and expenses of the insurer
- Limit the extent to which specified costs and expenses can be taken into account as costs and expenses of the insurer.

9.2 Principles

In setting the restrictions, the MAA is seeking a balance between:

- The need for insurers to collect sufficient premium to cover their operating business costs,
- Ensuring that insurers are only passing on expenses that are strictly necessary in providing a compulsory insurance product (e.g. given the developments in technology, savings may be possible in moving to the provision of electronic greenslips and renewals).

At the same time, the MAA recognises that each insurer has a unique operating model driven by their different strengths and market strategies. The MAA will also consider whether specific expense restriction mechanisms would unfairly penalise any single insurer due to their different operating model.

9.3 Operation

Operation of the expense restrictions will be addressed in the PDGs.

The PDGs will detail the nature and extent of the limitations to be applied to expenses, examples include:

- Limits on commissions payable to agents of insurers
- Specification of the types of overhead costs that are not permitted to be included in justification of expense levels

- The extent to which specific types of overheads may be included in justifying expense loadings
- Overall caps on insurers' expenses.

9.4 Transition

No transition is required. This power is contained in the fully funded test which is a permanent feature of the proposed Scheme (i.e. it exists beyond the transition period).

Revised PDGs will be effective from the commencement of the proposed Scheme.

10. Likely initial premium outcomes

10.1 Complexity of pricing and the premium system

As highlighted in this report, there are numerous factors that determine the final premium charged to an individual motorist in a competitive privately underwritten market.

Under the current premium system, the premium charged depends on:

- The insurer chosen – of which there are 7 – this determines the average price
- The vehicle class/district of vehicle insured – of which there are 163 – this determines the relevant published premium relativity to be applied
- The individual risk profile of the insured – e.g. age of driver insured, past driving history, age of vehicle insured, ownership of comprehensive motor vehicle insurance, distribution channel – each insurer uses a number of rating factors to determine the bonus/malus applicable on an individual policy.

The above items mean that at any given point, there is a wide variety of possible premiums in the market.

10.2 Impact of the pricing mechanisms

As part of the premium transition mechanisms discussed earlier in this report, their likely impact on the premium system under the proposed Scheme is illustrated in the following tables.

Table 2: Impact of pricing mechanisms

Key

⇩ = mechanism will act to reduce this component of premium

⇧ = mechanism will act to increase this component of premium

⇔ = mechanism will have little or no change to this component of premium

Premium aspect	Mechanism	Likely impact on premium component	
Average premium	❶ Guiding insurers' premiums	⇩	Expected reduction due to the lower expected cost of the proposed Scheme. Please refer to the EY Costing Report for further details.
	❼ Insurers' expenses	⇔ or ⇩	Reductions expected where individual insurers' expenses exceed the restrictions set by the MAA.
Premium relativities	❹ Premium relativities	⇧	Published premium relativities will increase for the vehicle classes and districts that will experience a material increase in benefits as a result of the move to no-fault benefits. However, the extent of any increases will be gradual and limited by the MAA to ensure affordability and stability of premiums for all segments of the market (see risk equalisation below).
		⇔ or ⇩	Published premium relativities will remain steady or decrease for the remaining vehicle classes and districts where there is less change in the mix of at-fault and not-at-fault benefits as a result of the move to the proposed Scheme. However, the extent of any changes will be gradual and limited by the MAA to ensure stability of premiums for all segments of the market.
	❺ Risk equalisation	⇩	Published premium relativities will be lower than what it otherwise would be for vehicle owners that benefit from the risk equalisation subsidy. Although motorists will not explicitly observe the impact of this mechanism, this mechanism is what allows the published premium relativities for some classes (e.g. motorcycles, country district vehicles) to be constrained.
		⇧	This mechanism will apply a small loading to pre-defined vehicle class/districts to fund the few vehicle class/districts that require the premium subsidy.
Bonus malus	❶ Guiding insurers' premiums	⇔ or ⇩	Generally there will be no impact on bonus malus except where an insurers' malus is limited by the premium constraints set by the MAA.
Aggregate overall impact on premium		**⇩**	**Largely driven by the reduction in average premium.**

Table 3: Other impacts of pricing mechanisms

Premium aspect	Mechanism	Likely impact on premium component	
Overall premium (in future premium years)	❷ Profit normalisation	None	There will be no impact on premium if the mechanism is not triggered.
		⇩ or ⇧	If the industry profitability or loss exceeds the thresholds set by the MAA, premiums in upcoming underwriting years will be adjusted to return any surplus to or recover any losses from policyholders.
Overall premium (one off impact in the first year)	❸ Unearned premium surplus	⇔ or ⇩	This will be applied to the benefit of policyholders, e.g. offset costs arising from implementing the proposed Scheme or reduction in premium.

10.3 Further development of the premium system transition mechanisms

Development of the premium system transition mechanisms described in this report is ongoing.

It will require the consideration of many different types of stakeholders (including different cohorts of motorists and differing nature of insurers' portfolios) as well as numerous consultations between the MAA, the Scheme Actuary, insurers and other interested parties.

We highlight that this development and future implementation of the mechanisms is and will be a complex process.

11. Reliance and Limitations

In investigating the pricing transition mechanisms, we have relied on communications with, and data provided to us by, the MAA and RMS. We have also relied on discussions with insurers as part of the Scheme reform consultation process.

This report is only intended to document at a high level the structure of the proposed premium system transition mechanisms, not the detailed operation or the parameterisation of the mechanisms.

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Appendix A Relativities

The table below shows the premium relativities effective 1 February 2013.

Class	Description	Metropolitan	Outer Metropolitan	Newcastle / Central Coast	Wollongong	Country
1	Motor Car	100	91	73	82	72
3c	Goods Vehicle <=4.5t GVM	128	102	88	117	64
3d	Goods Vehicle >4.5t - 16.0t GVM	259	150	150	150	96
3e	Goods Vehicle >16.0t GVM	642	397	400	540	336
5	Primary Producer's Vehicle	100	85	45	45	49
6a	Omnibus >16 Passengers	1,200	407	690	690	322
6b	Omnibus <16 Passengers	143	102	95	108	93
6c	STA Buses	2,420				
6d	Hospital & Charity Buses	100	93	73	82	72
6e	Other Buses	120	112	88	98	86
7	Taxi Cab	1,070	540	1,070	1,070	540
8	Private Hire Car	100	91	73	82	72
9a	Drive Yourself - Motor Car	255	238	238	238	238
9d	Drive Yourself - Goods Vehicle <=4.5t GVM	141	112	97	129	70
9e	Drive Yourself - Goods Vehicle >4.5t - 16.0t GVM	285	165	165	165	106
9f	Drive Yourself - Goods Vehicle >16.0t GVM	707	436	440	594	369
10d	Motorcycle <=225cc or Electric motorcycles	18	14	14	14	13
10e	Motorcycle 226 - 725cc	45	33	33	33	30
10f	Motorcycle 726 - 1125cc	70	54	54	54	46
10g	Motorcycle 1126 - 1325cc	122	74	74	74	74
10h	Motorcycle >1325cc	80	74	74	74	80
11	Police Vehicle	247				
12a	Fire Brigade Vehicle	125	108	100	113	100
12b	Other Fire Brigade Vehicle	40	20	20	23	20
13	Ambulance Vehicle	140	98	112	126	85
14	Undertaker's Vehicle	40	40	40	40	40
15a	Motor Trade Vehicle	30	26	24	27	23
15c	Tow Truck	650	210	182	182	200
17	Mobile Crane	250	230	250	250	200
18a	Miscellaneous Vehicle	200	138	160	181	80
18b	Farm Machinery	20	20	20	20	20
18c	Wheel Chair	2	2	2	2	2
19	Veteran or Vintage Vehicle	10	10	10	10	10
20	Street Rod Vehicle	10	10	10	10	10
21	Light Rail Vehicle	450				

Appendix B LTCS levies

The table below shows the LTCS levies effective 1 July 2013 to 31 December 2013.

Class	Description	Metropolitan	Outer Metropolitan	Newcastle / Central Coast	Wollongong	Country
1	Motor Car	17.83%	21.69%	23.67%	21.16%	24.42%
3c	Goods Vehicle <=4.5t GVM	24.94%	24.96%	24.08%	22.54%	26.74%
3d	Goods Vehicle >4.5t - 16.0t GVM	1.00%	2.93%	2.30%	2.30%	15.62%
3e	Goods Vehicle >16.0t GVM	2.33%	3.37%	2.79%	2.79%	5.81%
5	Primary Producer's Vehicle	29.38%	34.47%	33.26%	33.26%	31.09%
6a	Omnibus >16 Passengers	3.90%	5.31%	0.75%	4.22%	5.57%
6b	Omnibus <16 Passengers	4.77%	6.02%	5.80%	4.79%	5.99%
6c	STA Buses	12.96%	0.00%	0.00%	0.00%	0.00%
6d	Hospital & Charity Buses	17.83%	19.41%	20.03%	18.18%	21.87%
6e	Other Buses	17.83%	19.41%	20.03%	18.18%	21.87%
7	Taxi Cab	6.43%	3.09%	6.43%	6.43%	3.12%
8	Private Hire Car	17.83%	19.41%	20.03%	15.12%	21.87%
9a	Drive Yourself - Motor Car	17.63%	17.59%	17.59%	17.59%	17.59%
9d	Drive Yourself - Goods Vehicle <=4.5t GVM	17.72%	18.75%	18.09%	17.01%	20.03%
9e	Drive Yourself - Goods Vehicle >4.5t - 16.0t GVM	0.42%	1.67%	0.99%	0.99%	11.36%
9f	Drive Yourself - Goods Vehicle >16.0t GVM	1.58%	2.61%	1.98%	1.98%	4.56%
10d	Motorcycle <=225cc or Electric motorcycles	28.68%	30.87%	30.87%	31.91%	30.98%
10e	Motorcycle 226 - 725cc	35.37%	38.93%	39.72%	39.89%	38.86%
10f	Motorcycle 726 - 1125cc	36.88%	43.41%	41.72%	41.88%	43.53%
10g	Motorcycle 1126 - 1325cc	26.76%	35.83%	33.74%	34.19%	33.16%
10h	Motorcycle >1325cc	31.02%	39.51%	37.30%	37.49%	37.65%
11	Police Vehicle	18.97%	0.00%	0.00%	0.00%	0.00%
12a	Fire Brigade Vehicle	16.17%	17.21%	17.83%	16.87%	17.83%
12b	Other Fire Brigade Vehicle	21.32%	21.32%	21.32%	21.32%	21.32%
13	Ambulance Vehicle	15.46%	18.00%	16.94%	16.12%	19.29%
14	Undertaker's Vehicle	19.90%	21.32%	21.32%	21.32%	21.32%
15a	Motor Trade Vehicle	21.32%	21.32%	21.32%	21.32%	21.32%
15c	Tow Truck	6.71%	9.37%	10.50%	10.50%	10.50%
17	Mobile Crane	12.85%	13.14%	12.85%	12.85%	13.68%
18a	Miscellaneous Vehicle	10.50%	12.32%	11.47%	10.61%	15.10%
18b	Farm Machinery	21.32%	21.32%	21.32%	21.32%	21.32%
18c	Wheel Chair	21.32%	21.32%	21.32%	21.32%	21.32%
19	Veteran or Vintage Vehicle	21.32%	21.32%	21.32%	21.32%	21.32%
20	Street Rod Vehicle	21.32%	21.32%	21.32%	21.32%	21.32%
21	Light Rail Vehicle	9.99%	0.00%	0.00%	0.00%	0.00%

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