

# MOTOR ACCIDENTS INSURANCE BOARD

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21 February 2013

Mr Glenn Appleyard  
Chairman  
Tasmanian Economic Regulator  
Level 5, 111 Macquarie Street  
HOBART TAS 7000

Dear Sir

***Re: 2013 Investigation into the Pricing Policies of the Motor Accidents Insurance Board***

I refer to your letter of 18 January 2013 in which you notified us that you are to conduct an investigation into the MAIB's Pricing Policies.

A submission which addresses the matters contained in the Terms of Reference is attached. I understand that the submission will be published on the Regulator's website.

I look forward to working with you and your staff during the investigation process.

Yours sincerely

  
P.J Roche  
**CHIEF EXECUTIVE OFFICER**

Encl.



# Motor Accidents Insurance Board

## Tasmanian Economic Regulator Submission 2013

The submission has been prepared by Taylor Fry Consulting Actuaries  
on behalf of the MAIB and under the direction of the MAIB Board

21 February 2013

## TABLE OF CONTENTS

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EXECUTIVE SUMMARY .....	1
1 INTRODUCTION.....	10
2 KEY DEVELOPMENTS SINCE 2009 .....	13
3 GENERAL OPERATING ENVIRONMENT .....	21
4 MAIB GENERAL OPERATIONS.....	24
5 MOTOR ACCIDENTS INSURANCE IN AUSTRALIA .....	27
6 GENERAL INSURANCE – INSURANCE OPERATIONS .....	36
7 HISTORICAL AND CURRENT PREMIUMS .....	43
8 BREAK-EVEN PREMIUM 2013/14 .....	49
9 TRENDS IN KEY COST DRIVERS.....	54
10 BREAK-EVEN PREMIUM SENSITIVITY ANALYSIS.....	79
11 PRICING STRUCTURE – PREMIUM RELATIVITIES .....	84
12 FINANCIAL VIABILITY .....	95
13 PROFITABILITY AND FORECAST FINANCIAL POSITION.....	102

## APPENDICES

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Appendix A PRICING SCHEDULE At 1 DECEMBER 2012 .....

Appendix B COMPARISON OF MA SCHEMES.....

Appendix C CLAIMS COST ALLOCATION ISSUES .....

Appendix D FINANCIAL PROJECTIONS.....

# EXECUTIVE SUMMARY

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## Background

In accordance with Section 24 of the *Economic Regulator Act 2009* (“the ER Act”), the Tasmanian Economic Regulator (“the Regulator”) is investigating the pricing policies of the Motor Accidents Insurance Board (“MAIB”).

The Regulator is required to recommend maximum price increases for the MAIB premiums over the four years from 1 December 2013 to 30 November 2017.

## Purpose

As part of the investigation, the Regulator has requested a submission from the MAIB identifying:

- issues relevant to premium setting over the period 1 December 2013 to 30 November 2017; and
- forecast premium revenue and the scheme’s financial position.

This submission is intended to provide for informed discussion on the MAIB’s pricing policies. In a letter dated 17 December 2012 to the Regulator, the Minister of Finance outlined the terms of reference for the investigation.

The submission has been prepared by Taylor Fry Consulting Actuaries (“Taylor Fry”) on behalf of the MAIB and under the direction of the MAIB Board.

## MAIB Operations

The MAIB’s core business is providing financial compensation to people injured in motor vehicle accidents. In doing so, the MAIB is responsible to three stakeholder groups and must balance the competing interests of those groups.

**Table 1 MAIB stakeholder interests**

<b>Stakeholder</b>	<b>Interest</b>
Persons injured as a result of a motor accident, and their families	Quality service and appropriate level of compensation
Motorists	Affordable and cost competitive premiums
General community (represented by the State Government)	A commercial rate of return on capital (as required by the Government Business Enterprises (GBE) Act) and efficient use of that capital

In addition, all stakeholders have an interest in the continued financial viability and stability of the MAIB scheme.

The MAIB also focuses on accident prevention, either directly or by supporting other road safety organisations.

### Motor Accidents insurance

Personal Injury compensation provided by the MAIB is referred to in this submission as Motor Accidents (“MA”) Insurance. It is also referred to in some jurisdictions as Compulsory Third Party (“CTP”) insurance.

Each State and Territory in Australia operates its own MA Insurance arrangements with variations in:

- private or public sector operations;
- eligibility for compensation being solely “Fault Based” (Common Law) or a mix of fault based and “No-Fault” (Scheduled Benefits);
- compensation eligibility requirements, excesses and maximum benefits; and
- the cost of the insurance (premiums).

The Australian population generally regards the car as essential for a reasonable standard of living. MA insurance is compulsory for all motorists; therefore the provision of that product can be considered an “essential” service similar to the provision of electricity, telecommunication and water services.

Like other “essential” services, affordability and the need for stability are key issues which impact on pricing policies. MA insurance is by nature a risky business and is considered one of the more volatile insurance classes.

In both the private and public sector MA insurance schemes in Australia, there is therefore a degree of government intervention/regulation in pricing of the insurance. This intervention is aimed at maintaining a degree of community rating and relatively stable prices.

### Key developments since the 2009 pricing review

The 2009 pricing review was undertaken by the Government Prices Oversight Commission (GPOC), the predecessor to the Regulator. The review was undertaken during the Global Financial Crisis (“GFC”). Following the review, solvency returned much more quickly than projected to within the MAIB’s target range due to favourable investment returns and claims experience during 2009/10 and 2010/11. Whilst the overall claims experience has continued to be positive, the MAIB reported a loss during 2011/12 due to:

- reduced investment returns following a downturn in investment markets; and
- an increase in the claims expense as a result of reductions in risk-free discount rates.

The most significant developments in the areas of environment, experience and operations have been:

- The MAIB has experienced continued steady growth in the number of registered vehicles;
- The experience of the main drivers of claims costs has continued to improve:
  - The experience for Common Law has shown high levels of both nil and non-nil claim finalisation and reduction in the stock of open claims; and
  - Claim frequency has continued to reduce significantly. Continuation of funding for various road safety initiatives has been identified as one of the contributors to this improvement;
- There have been some areas of material deterioration, but these have generally been “one-off” negative changes rather than trends. including:
  - an allowance for an increase in care costs for Future Care claimants awarded by Fair Work Australia (FWA) in a decision handed down on 1 February 2012; and
  - an allowance for a foreshadowed increase in hospital bed-day rates from 30 June 2013. Hospital costs represent approximately 35% of Scheduled Benefit costs. As a precautionary measure until the actual increase has been negotiated with the Department of Health, the allowance has been set at a doubling of current rates.
- The proposed National Injury Insurance Scheme (“NIIS”) is intended to provide insurance cover for those who suffer a significant disability as a result of being injured on a no-fault basis. Recent developments have been:
  - Toward the end of 2012, an advisory group recommended minimum benchmarks for motor vehicle accidents. While the benchmarks are yet to be endorsed, they would have the effect of increasing MAIB’s claims costs relating to motor accidents significantly as people currently excluded from the scheme, such as unlicensed drivers, drivers of unregistered vehicles and drivers convicted of driving under the influence, will be covered;
  - On 7 December 2012, an Intergovernmental Agreement for the National Disability Insurance Scheme (“NDIS”) Launch was signed. That agreement stipulated that all States would endeavour to agree the minimum benchmarks mentioned above. If the host jurisdiction is unable to implement the benchmarks, that host jurisdiction will be responsible for 100 per cent of the cost of participants in the NDIS launch who would be eligible for NIIS (motor accident) benefits during the launch;

The calculated break-even premium in this submission does not make allowance for the proposed NIIS, because many details of NIIS remain uncertain. However, the developments described above indicate that the NDIS/NIIS is proceeding at a rapid pace and represents a material risk of increasing MAIB’s claims costs;

- There has only been one premium increase since the previous pricing review, as a result of these predominantly favourable trends. The very significant reduction in claim frequency has had the largest impact on required premiums;
- The economic environment since the 2009 review was initially dominated by the GFC and negative investment returns. During 2009/10 and 2010/11, investment returns were above the long run forecast as the market recovered somewhat from the GFC. However, during 2011/12 there was another downturn in investment markets resulting in reduced investment returns;
- The MAIB's investment policy has enabled the MAIB to benefit during periods of strong market growth, but has also resulted in greater volatility of returns and larger negative returns in periods of downturn;
- The MAIB's financial position, as indicated by solvency, has improved since the 2009 GPOC review which, as discussed above, was undertaken during the GFC. Solvency returned to within its target range in 2009/10, and exceeded the target range by June 2011. However, the solvency margin reduced to slightly below target by 30 June 2012 as a result of reduced investment returns and reductions in risk-free discount rates.

### Current Pricing Issues

#### *Break-even Premium 2013/14*

The MAIB's actuary (Taylor Fry) has assessed that an average break-even premium of \$258 (exclusive of duty and GST) is required for the period 1 December 2013 to 30 November 2014, based on a real rate of return of 3% per annum.

Without any premium increase at 1 December 2013, the average premium expected to be collected for the same period is \$287 (exclusive of duty and GST). The premium collected includes a profit margin in addition to the break-even premium. The implied profit margin, using current premiums, is therefore 10%, based on an assumed real rate of return of 3.0% per annum above wage inflation.

However, the implied profit margin based on current risk-free rates of return and inflation forecasts is now less than 0%. Based on current risk-free rates, the break-even premium would be \$301 (exclusive of duty and GST).

The adoption of a stable long-term real rate of return of 3% per annum avoids fluctuations in premiums, which would be inevitable if premiums were based on current market conditions from time to time. The above comparison shows that the effect of using the stable long-term rate in the current economic climate is to produce a break-even premium that is \$43 lower than the economic premium.

In the previous MAIB submission, the break-even premium was based on a real rate of return of 4%. The reasons for the reduction from 4% to 3% per annum are discussed briefly below and in more detail under section 9.7. The sensitivity of the break-even premium to the adopted real rate of return is shown in Section 10.2.

### *Trends in key claims cost drivers*

The break-even premium calculated by MAIB in 2009 was \$223, as reported in Table 3.6 of the 2009 GPOC report. To produce a comparison with the current assessed break-even premium, this estimate has been increased by four years of wage inflation at the rate assumed in the 2009 MAIB Submission, giving an inflation-adjusted equivalent break-even premium of \$254. The break-even premium of \$258 assessed for 2013/14 therefore represents an increase of 1.8% from the comparable premium in the previous MAIB Submission.

In addition, any premium determined then needs to have the 10% GST and \$20 duty allowance included. Since the 2009 pricing review, the amount of duty has increased from \$6 to \$20 per vehicle registration (effective 1 October 2012).

The 1.8% increase is the combined impact of a number of factors, some of which have produced increases in costs whilst others have produced reductions in the cost per vehicle:

- Claim frequency has again reduced despite the observation in 2009 that there were some indications that claim frequency was beginning to stabilise;
- However, the assumed cost per vehicle for Scheduled Benefits has increased due to a precautionary allowance for a doubling of hospital bed-day rates from 30 June 2013;
- The assumed cost per claim for Future Care has increased due to an allowance for an increase in care costs by FWA in a decision handed down on 1 February 2012. However, the overall assumed cost per vehicle has decreased as a reflection of continued favourable experience and in particular, due to a reduction in the projected number of incurred but not reported claims;
- The experience for Common Law has shown a reduction in the number of common law claims intimated and an overall reduction in the stock of open claims, offset in part by a higher than projected average settlement size;
- Overall there has been a slight decrease in expenses as a percentage of claim payments; and
- The break-even premium has increased due to the assumed real rate of return decreasing from 4% to 3% per annum. The decrease in real rates of return reflects the current and forecast economic conditions.

### **Pricing Structure**

In September 2012, the MAIB commissioned an actuarial review of the premium relativities to take into account the experience over the last 4 years. Consistent with the previous submission, the recent review of premium relativities has selected cost relativities that are based on an average of the following allocations:

1. **Fault basis:** allocating claim costs according to the degree of fault attributed to the vehicle class; and

2. ***Fault and Future Care spread basis:*** allocating non-Future Care costs based on fault, and spreading Future Care costs over all classes.

The recommendations from the review were driven by the existing relativities, the above cost allocations, the 2009 GPOC review recommendations and perceptions of the underlying risk, including the experience in similar schemes.

Relativity changes are proposed for

- Motorcycles (Classes 4, 5 and 20) from 1.28 to 1.50;
- Taxi or Chauffeured Hire Cars (Class 6) from 3.09 to 3.50;
- Medium Passenger Vehicles (Class 16) from 1.58 down to 1.35;
- Small Motorcycle (Class 17) from 0.50 to 0.60; and
- Off Road and Recreational Vehicle (Class 18) from 0.59 to 0.75.

### Financial viability

The financial viability of the MAIB depends on:

- charging premiums at least equal to the estimated cost of claims and expenses (that is, the break-even premium);
- sound claims management, particularly in the area of Future Care;
- accident prevention strategies;
- an effective investment strategy;
- a capital policy that recognises the variability of the business; and
- a dividend policy that recognises the variability of measured profit and the interaction with pricing and capital policies.

The premium and claims components have been discussed above. The remaining financial viability elements are discussed below.

### Investment Strategy

A review of solvency was conducted jointly by Taylor Fry and Macquarie Risk Advisory Services in 2001. One of the recommendations from that review was the targeting of higher investment returns by adopting a benchmark asset allocation with a higher proportion of growth assets. This policy was implemented and remains in place.

Between 2006 and 2009, the investment policy led to increasing proportions of growth assets, particularly equities. This enabled the MAIB to benefit from strong market growth in the first two years, but also resulted in greater negative returns during the GFC than a more conservative policy.

Since the 2009 GPOC review, the investment policy has again enabled the MAIB to benefit from higher investment returns between 2009 and 2011 but also resulted in lower investment returns during 2011/12.

In the previous pricing submission, the MAIB assumed a real rate of investment return (above wage inflation) of 4% per annum. However, the MAIB's asset consultant, Towers Watson, now considers a real rate of return of 3% per annum to be more appropriate, having regard to current and forecast economic conditions. Without increasing the MAIB's risk profile, the view of MAIB's asset consultant is that a 4% real rate of return is only likely to be achievable with a low level of confidence (less than 50%).

### Capital Policy

The Board has established a target capital which seeks to achieve a balance between the desire to hold capital to ensure that "normal" fluctuations in experience can be funded without volatility in premiums, and the responsibility to make efficient use of capital.

The Board has resolved that, for the purposes of capital monitoring, the net assets reported in the annual accounts will be reduced by the dividends that have been calculated from previous years' results, but which have not yet been paid.

An evaluation of the Board's solvency position was undertaken by its actuary in April 2007, following the Board's move to a higher proportion of growth assets. The Board adopted the actuary's recommendation that the target solvency be increased to a range of 20% - 25%. In March 2012, the MAIB's actuary reviewed MAIB's capital policy in light of the proposed changes to APRA's Minimum Capital Requirements ("MCR"). The actuary recommended that the current targets be maintained, because it was not possible to anticipate where the average level of MCR coverage among private insurers would fall after 1 January 2013. However, it was also recommended that, in view of the likelihood of some increase in solvency target, the MAIB aim for the upper end of the current solvency targets.

The Scheme's solvency fell below 20% following the GFC. Current forecasts indicate that the solvency level will return to the middle of the target range by 30 June 2013.

### Future premium requirements

Two scenarios for future premium increases have been considered:

- Scenario 1: current premiums increase in line with Australian AWOTE for the period 1 December 2013 to 30 November 2017; and
- Scenario 2: current premiums increase in line with CPI for the period 1 December 2013 to 30 November 2015. At that stage, the profit margin is projected to have reached its target level of 10% and so premium increases in line with Australian AWOTE have been included thereafter.

Under Scenario 1, the expected long-term profit inherent in each year's premium is around 13.5% on the current pricing basis. This translates to an after-tax return on

target capital of about 7.7% per annum. However, as a result of the unusual economic climate, the implied profit margin based on current risk-free rates is around 0%.

Under Scenario 2, the expected profit inherent in each year’s premium decreases from around 12.3% to 10.8% on the current pricing basis and is less than 0% based on current risk free rates and inflation forecasts. The after-tax return on capital implied by this scenario is expected to decrease from 7.4% to 7.1%.

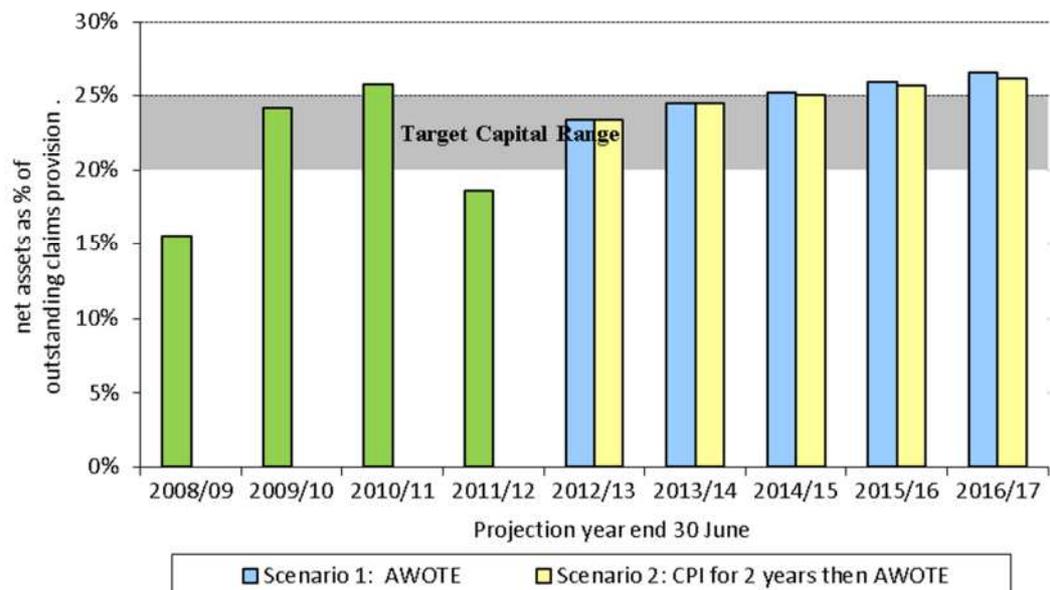
Under both measures, profitability is projected to exceed the target level unless claims costs or investment returns prove to be less favourable than forecast.

Claims costs are assumed to increase in future in line with increases in Tasmanian Average Weekly Ordinary Times Earnings (“AWOTE”). However, future premium increases have been based upon forecasts for Australian AWOTE, rather than Tasmanian AWOTE, as a reflection of the Regulator’s practice of using Australian AWOTE for maximum allowable increases. The MAIB Premiums Order defines AWOTE as ‘the dollar figure for full-time adult ordinary time earnings for persons set out in that part of the Average Weekly Earnings under the heading ‘Average Weekly Earnings’, Australia: Original.’ Historically, Australian AWOTE has exceeded Tasmanian AWOTE by between 0.25 and 0.5% per annum.

### Forecast Solvency

The chart below shows the projected future solvency position under each of the two premium increase scenarios described earlier.

**Chart 1 Forecast Solvency**



Under both scenarios, solvency is projected to return slowly to the target range during 2012/13 and to exceed the target range during 2014/15. The key reason for this is that long term investment returns are projected to be higher than the assumed rate of increase in claims costs.

If future developments are less favourable than expected, then the current solvency position will be eroded. If future developments are more favourable than expected, then the maximum premium increases will not need to be applied.

### Preferred Scenario

Scenario 2 reduces profit margins closer to target. However, Scenario 1 is considered a more appropriate option for maximum allowable increases, in light of the potential threats to MAIB's projected financial position, including:

- At the time of the 2009 pricing review, there were some signs that claim frequency improvements were slowing – and in fact, 2008/09 claim numbers turned out to be the highest in several years. The latter quarters of 2012 have shown that claim numbers may have stabilised. These two periods indicate that the claim frequency improvements that have reduced the need for premium increases in recent years are uncertain. If the frequency improvements do not continue, the MAIB is likely to need to increase premiums at some stage during the next four years.
- The introduction of NIIS is estimated to increase MAIB claim costs. While the exact details are not yet known, recent estimates of the potential increases arising from recommendations by COAG advisory groups suggest that they would reduce the MAIB profit margin to below its target level. Government announcements indicate that the NIIS is planned to be introduced during the next four years;
- The break-even premium includes additional allowances for proposed increases in hospital rates, ambulance rates and Future Care care cost rates. The uncertainty surrounding these increases indicates a need for flexibility in premium increases.

Scenario 1 provides the flexibility to increase premiums if any of the threats identified above materialise over the next four years, noting that MAIB would not apply the full AWOTE increase each December unless it is warranted at the time.

### Recommendation

**It is recommended that Scenario 1 be adopted, namely that the maximum increases be based on current premiums increasing in line with Australian AWOTE for the period 1 December 2013 to 30 November 2017.**

# 1 INTRODUCTION

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## 1.1 Background

In accordance with Section 24 of the *Economic Regulator Act 2009* (“the ER Act”), the Tasmanian Economic Regulator (“the Regulator”) is investigating the pricing policies of the Motor Accidents Insurance Board (“MAIB”).

The Regulator is required to recommend maximum price increases for MAIB premiums over the four years from 1 December 2013 to 30 November 2017.

As part of the investigation, the Regulator has requested a submission from the MAIB discussing:

- issues relevant to setting break-even premiums over the period 1 December 2013 to 30 November 2017;
- forecast premium revenue and the scheme’s financial position; and
- information and analysis of premium relativities.

In addition to taking into account the matters referred to in Section 31 of the ER Act, this submission must consider:

- the scope and intent of the *Motor Accidents (Liabilities and Compensation) Act 1973* (“The Act”);
- whether any cross-subsidies exist in the current pricing structure (especially in relation to different vehicle classes and different risk types) and if they exist, the benefits and costs of retaining these cross-subsidies;
- an appropriate mechanism to remove these cross-subsidies should this be considered desirable;
- the appropriateness of the MAIB using current insurance industry prudential requirements as a benchmark to measure long term sustainability;
- the provision of funding by the MAIB to the following:
  - the Road Safety Advisory Council; and
  - recognised groups through the Injury Prevention and Management Foundation;
- the appropriateness of current claim liability valuations;
- the loading required on periodic premiums to ensure that there is no net impact on MAIB’s revenue;
- the impact of recent amendments to the following acts on vehicle classification:

- *Passenger Transport Services Act 2011*;
- *Taxi and Luxury Hire Car Industries Amendment Act 2011*; and
- *Passenger Transport and Related Legislation (Consequential Amendments) Act 2011*;
- The potential impact of the proposed National Injury Insurance Scheme on the MAIB;
- The potential impact of the introduction of the National Heavy Vehicle Regulator; and
- The correlation of MAIB classification of vehicles and the premium order to other areas managed by state regulation.

This submission is intended to provide for informed discussion on the pricing policies of the MAIB.

This is the sixth investigation undertaken by the Regulator, formerly GPOC. The previous investigation was undertaken in 2009 and recommended maximum price increases for the 4 years from 1 December 2009.

This submission has been prepared by Taylor Fry Consulting Actuaries (“Taylor Fry”) on behalf of the MAIB.

## 1.2 Structure

This submission is structured to provide:

- an update on key developments since the 2009 investigation (Section 2);
- the general legislative and political environment under which the MAIB operates (Section 3);
- an understanding of the general operations of the MAIB, including the nature of Motor Accidents (“MA”) insurance and the financial operations of insurance companies (Sections 4 , 5 and 6);
- an overview of current MA market prices (Section 7);
- details of break-even premium issues (Sections 8, 9 and 10) including:
  - the break-even premium required to meet expected MAIB claims costs and expenses arising in 2013/14;
  - past trends in break-even premium cost drivers;
  - the sensitivity of break-even premium to changes in key cost drivers;
- considerations for an appropriate pricing structure (Section 11);

- the requirements for the MAIB to be financially viable including investment, dividend and capital policies (Section 12);
- consideration of the requirement for the MAIB to achieve a sustainable commercial rate of return together with the forecast financial position (Section 13).

The MAIB was established under the Act and commenced 1 December 1974. Its primary function is to manage all aspects of compensation awarded to persons suffering injury caused by a motor vehicle as prescribed by the Act.

For the purpose of our analysis, claims costs have been separated into three broad categories, each of which has different payment size and pattern characteristics:

- Scheduled Benefits;
- Common Law; and
- Future Care.

A description of these benefit types is contained in Appendix A of this report.

## 2 KEY DEVELOPMENTS SINCE 2009

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### 2.1 Purpose of this section

This section highlights key changes to areas impacting on the MAIB since the previous pricing review in 2009:

- **Environment** - legislative and regulatory changes as well as changes to the broader insurance environment;
- **Experience** – changes to claims costs, investment returns etc;
- **Operations** – investment strategies, dividend policies etc.

### 2.2 Environment

#### 2.2.1 General Insurance Environment

The profitability of the general insurance industry has declined in the last eight years, following a period of high profitability resulting from premium increases and stricter underwriting in response to the HIH collapse and liability crisis. Industry profitability has declined due to a combination of the following:

- increased competition has reduced prices;
- high investment returns in 2006 and 2007, particularly from equities markets, which were more than extinguished by the GFC in 2008 and continued economic turmoil in subsequent years; and
- an increase in the number and severity of weather-related catastrophes.

APRA's latest industry performance statistics, for the year to 30 September 2012, showed a 7.7% rise in net premium revenue, whilst gross incurred claims for the industry in the year ended 30 September 2012 were down 26% per cent from the previous year. The high gross incurred claims in the year ended 30 September 2011 was due to a series of natural catastrophes during that period. However, increased reinsurance recoveries related to the catastrophic events reduced the impact on net incurred claims in that year. Net incurred claims for the year to 30 September 2012 were unchanged from the previous year.

The net loss ratio for the industry in the year 30 September 2012 was 67 per cent, down slightly from 72 per cent in the previous year and 71% at the time of the previous pricing review.

### 2.2.2 Economic climate

The economic climate has a very significant impact on the MAIB's projected liabilities and solvency margin. The previous pricing review was undertaken during the global financial crisis ("GFC"). The overall effect of the global financial crisis was estimated to be in the order of a 20-25% reduction in the MAIB's solvency position as a result of the increase in the projected gross central estimate of claim liabilities – due in turn to revised economic assumptions and two successive years of investment loss.

There has been considerable recovery in the global financial markets since March 2009. However a full recovery is far from assured and the global economic turmoil continues. After two years of favourable investment returns, investment returns were again lowered during 2011/12 and very low bond yields have again increased the projected claim liabilities.

The MAIB has a significant exposure to long-tail liabilities matched by an equivalent allocation to growth assets. Consequently, investment performance is affected significantly by volatility in world and domestic financial markets and the unusually low bond yields relative to inflation forecasts.

Whilst long-tail liabilities and market investments are monitored and reviewed by the MAIB regularly, the final outcome of each is significantly affected by the economic climate which is beyond the control of the MAIB. Potential movements in solvency are outlined in the sensitivity analysis of Section 10.

In a letter dated 22 January 2013, the MAIB's asset consultant, Towers Watson advised that:

- the current low, and likely somewhat persistent, yield environment creates challenges for long term investors with inflation linked liabilities who utilise bonds, in full or in part, to match or immunise their liability profile;
- Towers Watson's modelling of MAIB's strategic and current portfolio (with allowance for dynamic tilts) both reveal a median real return of 3.1% per annum over a 15 year period. This means that based on their assumptions, there is a 50% chance of achieving this outcome; and
- there is strong evidence that a real return assumption of 4% per annum coupled with an absolute return assumption for use in the Corporate Plan of 7.6% are only likely to be achievable with a low level of confidence (less than 50% in both cases).

As a result of this advice, which reflects the change in economic climate and future uncertainty, the real rate of return assumed in the break-even premium has been reduced from 4% to 3% per annum.

### 2.2.3 Motor Accidents (Liabilities and Compensation) Act 1973

A summary of key amendments to the MAIB's Act and Regulations since the 2009 pricing review are summarised in the table below.

**Table 2.1 Key changes to the MAIB Act since 2009 pricing review**

Effective date	Description of change
1-Aug-2012	<p>Medical/disability benefits - maximum payable increased to \$500,000 where a person has been an inpatient for more than four days</p> <p>Death benefits - maximum lump sum increased from \$62,000 to \$70,000</p> <p>Death benefits - additional children's benefits increased from \$15,000 to \$22,500, \$7,500 to \$11,250 and \$3,000 to \$4,500 respectively.</p> <p>Disability Allowance - the threshold for employed person's allowance has been adjusted so that:</p> <ul style="list-style-type: none"> <li>• those earning more than \$400 per week are entitled to 80% of their average weekly earnings;</li> <li>• those earning between \$400 per week and \$320 per week are entitled to \$320 per week; and</li> <li>• those earning \$320 per week (previously \$250 per week) or less are entitled to 100% of their average weekly earnings.</li> </ul>

The potential impact of the amendments has been taken into account in formulating the assumptions for the break-even premium.

#### 2.2.4 MAIB initiatives

The MAIB provides significant funding for a range of road safety/accident prevention programs, including:

- **Road Safety taskforce (RSTF)** - initiated in July 1996 to reduce road trauma to target levels through enforcement and mass media. The Road Safety Task Force was incorporated under the Road Safety Advisory Council in October 2010. The combined enforcement and educational program funded by the MAIB continued under the new arrangement. The latest agreement provides for funding of \$3.480 million per annum for three years from 1 January 2012.
- **Motorcycle Safety Strategy** - Initially, MAIB made a three year commitment of \$500,000 in total directed to a range of activities to enhance rider safety. The MAIB subsidized Motorcycle Road Skills Courses have continued beyond that period with the use of unexpended funds. The take up rate has been modest in the past year and additional promotion is taking place in 2012/13.

#### 2.2.5 National initiatives

The Australian Government has also introduced a number of new initiatives in recent years, including:

- **Clean Energy Act 2011** - which imposes a "carbon tax". This new tax is expected to have minimal impact on MAIB operations;
- **National Injury Insurance Scheme** - discussed in Section 2.2.7;

- **The Fair Work Australia decision** in the Equal Remuneration Case affecting the social, community and disability services industry, was handed down on 1 February 2012. Discussed in Section 2.2.8;
- **The Heavy Vehicle National Law** established a single national regulator for heavy vehicles, rail safety and maritime safety. This is expected to have only a minimal impact on MAIB operations. Discussed in section 2.2.9; and
- **The harmonisation of Occupational Health and Safety laws** through the adoption of model Workplace Health and Safety Laws will have little direct impact on the MAIB. However, issues may arise due to liability concerns from rehabilitation practitioners in relation to return to work programs for injured motorists.

### 2.2.6 Passenger Transport

The Regulator's Terms of Reference refer to the impact of recent amendments to the following acts on vehicle classification.

#### *Passenger Transport Services Act 2011 and Passenger Transport and Related Legislation (Consequential Amendments) Act 2011*

Section 11 of the *Passenger Transport Services Act 2011* addresses the definition of a passenger transport service. The impact on the current Premiums Order (in particular, the transfer of vehicles between Class 16 and Class 1) is considered under Section 11.4.4.

#### *Taxi and Luxury Hire Car Industries Amendment Act 2011*

The impact of the provision under the above Act for general or specific restricted hire vehicle services (Section 84C) is considered in section 11.4.4.

### 2.2.7 National Injury Insurance Scheme ("NIIS")

The Productivity Commission undertook an inquiry into a National Disability Long-term Care and Support Scheme and in its July 2011 report it proposed two distinct schemes:

- National Disability Insurance Scheme ("NDIS"); and
- National Injury Insurance Scheme ("NIIS")

The NIIS is proposed to provide insurance cover for those who suffer a significant disability as a result of being injured on a no-fault basis. State and Territory motor accident schemes such as MAIB have been identified as the core existing framework around which the NIIS could be developed.

The Federal Government established a Council of Australia Government "COAG" advisory group to lead the reform. Toward the end of 2012, the advisory group recommended minimum benchmarks for motor vehicle accidents. COAG is yet to endorse the benchmarks, but if they do so, they would have the effect of increasing MAIB's claims liabilities relating to motor accidents significantly as persons currently excluded from the scheme, such as unlicensed drivers, drivers of unregistered vehicles and drivers convicted of driving under the influence, will be covered.

Additionally, significant injuries suffered in any other circumstance, such as scuba-diving, horse riding, boxing, rock climbing, motor racing, hang gliding and criminal assaults, are also proposed to be covered under the NIIS. The MAIB has no statistical data upon which it could make a valid prediction as to the likely increase in claims cost, has concerns about the ability to appropriately value the risk and has concerns about how premium will be raised to cover the potential liability.

The MAIB continues to work with other jurisdictions in relation to the proposed National Injury Insurance Scheme (NIIS). While the MAIB has been providing long-term care to the catastrophically injured for more than 20 years, the proposed scheme does have design and pricing issues to be resolved should the Tasmanian Government decide to adopt the National model.

The latest timetable is for COAG to consider NIIS stage 1 (motor vehicles) in mid 2013 with a proposed implementation date of April 2014. If the changes are adopted there will be a need for significant coordinated Federal and State legislation to achieve the intended outcome.

On 7 December 2012, an Intergovernmental Agreement for the National Disability Insurance Scheme (“NDIS”) Launch was signed. That agreement stipulated that all States would endeavour to agree the minimum benchmarks mentioned above. If the host jurisdiction is unable to implement the benchmarks, that host jurisdiction will be responsible for 100 per cent of the cost of participants in the NDIS launch;

The calculated break-even premium in this submission does not make allowance for the proposed NIIS. However, the developments described above indicate that the NDIS/NIIS is proceeding at a rapid pace and represents a material risk of increasing MAIB’s claims costs. Accordingly, some estimates regarding the potential impact of the NIIS on the break-even premium have been included in section 10.4 (sensitivity analysis), based on the advisory group’s recommendations. Until a decision regarding NIIS is reached, it is not possible to include full costing for an expanded scheme.

### 2.2.8 Fair Work Australia decision

Fair Work Australia (“FWA”) awarded significant increases to carers in a decision handed down on 1 February 2012. The increases ranged from 19% for Level 2 to 41% for Level 8 carers and were to be applied in nine equal steps on 1 December each year, commencing in 2012 and finishing in 2020. In addition, FWA awarded cumulative annual loadings of 1% per annum over the first four years of the implementation period. The weighted average increase was 24% above CPI, spread over the nine years. The calculated break-even premium includes an allowance for this increase in Future Care care costs.

### 2.2.9 National Heavy Vehicle Regulator

In July 2009, the COAG agreed to establish single national regulators for heavy vehicles, rail safety and maritime safety. In August 2011, COAG, with the exception of Western Australia, signed the *Intergovernmental Agreement on Heavy Vehicle Reform* to establish

an independent regulator and national law for all vehicles over 4.5 tonnes Gross Vehicle Mass.

The outputs will be the Heavy Vehicle National Law (“HVNL”); an independent National Heavy Vehicle Regulator (“NHVR”); agreed national standards for the delivery of heavy vehicle regulatory services and activities; and service level agreements between the regulator and each State and Territory, to deliver services and activities under the national system.

The Regulator will commence operations with a limited set of functions from 21 January 2013, with the national law currently scheduled to commence for all jurisdictions (except Western Australia) from July 2013.

The HVNL consolidates model legislation relating to: heavy vehicle registration; heavy vehicle standards; heavy vehicle charges; mass and loading; oversize and over-mass vehicles; restricted access vehicles; higher mass limits; compliance and enforcement; heavy vehicle driver fatigue; heavy vehicle speeding compliance; the intelligent access project; and alternative compliance.

The transition to the HVNL is a larger implementation task for Tasmania than for most other jurisdictions. However, the impact of the establishment of the regulator on MAIB’s operations is expected to be minimal.

The HVNL also introduces a single, national registration system for heavy vehicles. However, implementation of this system was estimated to be costly and could not be completed in time for the commencement of the HVNL.

At this stage, Transport Ministers are due to consider options for a national registration system at their first ministerial council meeting, scheduled for May 2013. These options primarily relate to the type of technical platform to be used (cloning, hosting, building a new system etc). Implementation timeframes for the national registration system are uncertain, but further work will be done in the lead-up to the meeting in May. National registration will definitely not commence within the 2013 calendar year. State-based registration for heavy vehicles will continue in the interim.

The NHVR is aware that design of any future system will have to take into account a variety of MA arrangements across Australia. The General Manager (Operations) at the NHVR has advised that there are no proposals at this stage to harmonize the current MA and stamp duty arrangements into a unified system across Australia.

#### 2.2.10 APRA prudential requirements

From January 2013, APRA’s new Prudential Capital Standards will apply to all regulated insurers in Australia. The new framework is designed to be more risk-sensitive and encourage better matching of assets with liabilities.

The MAIB is not regulated by APRA, however in the interest of sound insurance practice MAIB policies have regard to APRA requirements. For several areas, the MAIB has used APRA requirements as a benchmark against which to measure its own position. This includes APRA’s minimum capital requirement (MCR). A survey conducted by Mercer titled Investment of Accident Compensation Insurers indicated that half of the insurers monitor the capital adequacy of their Scheme under APRA’s capital standards. The appropriateness

of the MAIB using current insurance industry prudential requirements as a benchmark to measure long term sustainability is considered further under Section 3.4.2.

In March 2012, the MAIB's actuary reviewed MAIB's capital policy in light of the proposed changes to APRA's Minimum Capital Requirements. The actuary recommended that the current targets be maintained, because it was not possible to anticipate where the average level of MCR coverage among private insurers would fall after 1 January 2013. However, it was also recommended that, in view of the likelihood of some increase in solvency target, the MAIB aim for the upper end of the current solvency targets.

## 2.3 Experience

Key features of the MAIB's experience over the past four years include:

- continued growth in the number of registered vehicles;
- continuation of the trend to improved frequency of Common Law and Scheduled Benefits claims;
- continued high numbers of settlements of Common Law claims, resulting in a reduction in open claim numbers;
- lower than projected number of Future Care claims, due to lower than expected number of claims recognised as Future Care and a large number of exits;
- only one premium increase since the previous GPOC review, as a result of these favourable claim trends;
- high investment returns in 2009/10 and 2010/11, but a low return in 2011/12; and
- initial strong improvement in Scheme solvency after a significant reduction due to the GFC, followed by deterioration in the latest year as a result of the current economic turmoil.

## 2.4 Operations

### 2.4.1 Investment policy

In 2001 the MAIB commissioned a "Solvency Review" which was conducted jointly by Taylor Fry and Macquarie Risk Advisory Services. One of the outcomes of the review was the targeting of higher long-term investment returns by adopting a benchmark asset allocation with a higher proportion of growth assets<sup>1</sup>.

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<sup>1</sup> The solvency review was discussed in some detail in the submission to the 2003 GPOC review. A summary of that discussion is also provided in this report, at Section 12.2.

Investment policies are subject to regular review by the Board. During 2012 the investment strategy was reviewed and broadly confirmed. In particular, since the 2009 pricing review, the Board has maintained the same proportion of growth assets in the portfolio (65%) and target solvency range of 20% to 25% of outstanding claims. An MCR range of 75%-85% is the secondary target range. These ranges are approved by the MAIB on the recommendation of its actuary and are considered appropriate to the current investment strategy. However, as discussed above, as a reflection of APRA's more onerous approach to capital adequacy from 1 January 2013, the MAIB's actuary has recommended the targeting of the upper end of these ranges. Further information is provided in Section 12.3.

#### 2.4.2 Liability valuation

The MAIB seeks regular actuarial advice regarding the valuation of its outstanding claims liabilities. In addition to the regular review of claims experience assumptions, the latest liability valuation includes specific allowance for the following negative changes:

- an allowance for an increase in care costs for Future Care claimants by Fair Work Australia in a decision handed down on 1 February 2012. This has been added to existing inflation assumptions. Overall, the decision resulted in an average 24% increase above CPI, to be spread over the nine years from 2012 to 2020;
- an allowance for an increase in hospital bed-day rates from 30 June 2013. Hospital costs represent approximately 35% of Scheduled Benefit costs. There is considerable uncertainty surrounding the foreshadowed increase in hospital bed-day rates, following advice from the Department of Health that they will be seeking a significant increase in the average rate payable by the MAIB for treatment in Tasmanian hospitals. As a precautionary measure until the actual increase has been negotiated with the Department of Health, the allowance has been set at a doubling of current rates; and
- an allowance for a likely increase of approximately \$0.5 million per annum in Ambulance Tasmania fees as a result of a comprehensive fee review.

## 3 GENERAL OPERATING ENVIRONMENT

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### 3.1 Purpose of this section

This section is a summary of the current legislation and associated issues relevant to the MAIB's operations. The preceding section highlighted *changes* in the general operating environment since the previous pricing review.

### 3.2 The Motor Accidents (Liabilities and Compensation) Act 1973

The Act established the MAIB to administer the funding and payment of compensation for persons injured in motor accidents.

Since its inception, the MAIB's role has expanded from simply managing claims to a more pro-active role in relation to care and rehabilitation and in funding initiatives to reduce the number of road accidents.

### 3.3 National Competition Policy

The package of National Competition Policy Reforms endorsed by COAG has given rise to a significant change in the MAIB's operating environment since 1995.

The main objective of these reforms is to ensure that government businesses do not enjoy a net competitive advantage over private sector counterparts as a result of their public sector ownership.

In addition, the National Competition Policy Reforms required each participating government to review, and where possible, reform all legislation restricting competition by the year 2000. The legislative review process in respect of the MAIB was completed in 1997 and the recommendation to retain the MAIB as a monopoly provider of Motor Accidents Insurance in Tasmania was accepted by successive Tasmanian Governments.

Resulting legislation enacted to achieve these reforms is described below.

#### 3.3.1 *The Government Business Enterprises Act 1995 – "GBE" Act*

Section 7(1) of the GBE Act sets out the principal objectives of GBEs as follows:

*"(a) to perform its functions and exercise its powers so as to be a successful business by –*

*(i) operating in accordance with sound commercial practice and as efficiently as possible; and*

*(ii) achieving a sustainable commercial rate of return that maximises value for the State in accordance with its corporate plan and having regard to the economic and social objectives of the State; and*

*(b) to perform on behalf of the State its community service obligations in an efficient and effective manner; and*

*(c) to perform any other objectives specified in the Portfolio Act.”<sup>2</sup>*

### 3.3.2 The Economic Regulator Act 2009

The ER Act established the Tasmanian Economic Regulator (“the Regulator”) as a mechanism for independent pricing oversight. This role was previously conducted by the Government Prices Oversight Commission (“GPOC”) under the *Government Prices Oversight Act 1995*, until 31 May 2010. GPOC undertook the last review of the MAIB’s pricing policies in 2009 with its final report released in June 2009. Maximum premiums for the four years commencing 1 December 2009 were set after the government’s consideration of the GPOC’s report.

### 3.4 Australian Prudential Regulation Authority (“APRA”)

The Australian Prudential Regulation Authority (“APRA”) has the role of supervising private sector general insurers. Significant reforms to the APRA regulatory regime were introduced with effect from 1 July 2002. In February 2006, APRA released new prudential standards as part of its general insurance stage 2 reforms, following extensive development and consultation.

From January 2013, APRA’s new Prudential Capital Standards will apply to all regulated insurers in Australia. The new framework is designed to be more risk-sensitive and encourage better matching of assets with liabilities.

The MAIB is not regulated by APRA, however in the interest of sound insurance practice MAIB policies have regard to APRA requirements. For several areas, the MAIB has used APRA requirements as a benchmark against which to measure its own position. This includes APRA’s MCR. A survey conducted by Mercer titled Investment of Accident Compensation Insurers indicated that half of the insurers monitor the capital adequacy of their Scheme under APRA’s capital standards.

The MAIB’s current capital policy was developed along the following lines:

- The APRA basis applies to private sector insurers operating in a commercial environment. This can be considered the highest capital basis that MAIB should adopt;

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<sup>2</sup> Section 7(1) of the *Government Business Enterprises Act 1995 (No. 22 of 1995)*

- The scheme operates as a monopoly government guaranteed scheme. In theory, this means that it can operate with a zero solvency margin. This can be considered the lowest capital basis that the MAIB should adopt;
- However, it seems reasonable that MAIB should hold some level of net assets for a variety of purposes:
  - to meet unforeseen increases in liabilities (such as catastrophic claims, revaluation of common law claims following the setting of a new precedent, revision of all Future Care claims following establishment of new standards of care or as a result of medical advances) without resorting to large premium increases;
  - to absorb any short-term mismatches between scheme costs and premiums as a result of changing trends. These can sometimes take several years to emerge, with the need to catch up several years of undercharging by the time the trends have been fully recognised;
  - to absorb fluctuations in the value of investments, following share or bond market crashes;
  - to provide additional reassurance to claimants that benefits are secure; and
  - to provide resources for strategic investments, such as development of Future Care facilities or Road Safety initiatives, which may lie outside the scheme's ability to fund them from cash flows;
- These factors taken together suggest that a reasonable level of capital for MAIB should be somewhere between zero and the level applying in the private sector;
- The resulting capital target was expressed as a range of percentage of net outstanding claims provisions;
- This MCR target was converted to a solvency margin target of 20% to 25%, to avoid changes to the solvency margin due to changes in asset allocation and changes due to small changes in APRA regulation.

## 4 MAIB GENERAL OPERATIONS

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### 4.1 Purpose of this section

MAIB Mission Statement:

*To provide a commercially viable, cost competitive, high quality, personal injury insurance scheme which offers fair and equitable compensation for people injured in a motor accident.*

The MAIB operates principally as a specialist insurance business. This section provides a very general overview of the operations of a MA insurance company.

### 4.2 Core Business Operations

The core business activities of the MAIB are as follows:

- assessment and payment of scheduled benefits in accordance with the requirements of the Act and the *Motor Accidents (Liabilities & Compensation) Regulations 2010*;
- settlement of common law damages claims pursuant to the indemnity provisions of the Act;
- setting of premiums in accordance with Part 4 of the Ministerial Charter;
- investment of the assets of the MAIB;
- funding of motor accident prevention programs; and
- funding of motor accident injury prevention and management programs.

### 4.3 Stakeholder interests

The MAIB is responsible to three stakeholder groups in Tasmania and must balance the competing interests of those groups.

**Table 4.1 MAIB stakeholder interests**

<b>Stakeholder</b>	<b>Interest</b>
Persons injured as a result of a motor accident, and their families	Quality service and appropriate levels of compensation
Motorists	Affordable and cost competitive premiums
General community (represented by the State Government)	A commercial rate of return on capital (as required by the GBE Act) and efficient use of that capital

In addition, all stakeholders have an interest in the continued financial viability and stability of the MAIB scheme.

To be a successful business, the MAIB's operations must recognise the requirements of all three groups. In particular:

- effective accident prevention initiatives will help to contain premiums and reduce the non-financial costs associated with motor accidents, such as trauma and suffering;
- prompt delivery of services will minimise the financial difficulties that may be experienced by people injured as a result of a motor accident (and their families);
- appropriate co-ordination of services available, such as rehabilitation, will assist in achieving the best outcomes for people injured as a result of a motor accident;
- a controlled, systematic, fair and consistent approach to claim assessment and payment will prevent potential cost increases as a result of overuse and abuse of compensation provided;
- investing available assets to obtain the best possible return within appropriate risk parameters will ensure that adequate funds are available to meet long-term claim liabilities;
- continuous disclosure to the Portfolio Minister and Treasurer in accordance with Treasury Guidelines will ensure they are fully informed of performance and any significant developments impacting on performance;
- maintenance of an internet site that provides accurate and relevant scheme information which allows for customer feedback; and
- continuous improvement of efficiency in all areas will minimise the expenses associated with scheme management and administration which are currently less than 50% of peer average.

No significantly different strategic initiatives or restructures are planned or envisaged.

#### 4.3.1 Results of client market survey August 2007

The MAIB commissions biennial surveys of claimant satisfaction as part of its performance evaluation and to gather information which can be used to improve the efficiency and effectiveness of the organisation. The MAIB targets 85% satisfaction for overall service delivery. The latest survey involved 336 recent and current clients and was completed in October 2011.

As part of the survey claimants scored aspects of service both in terms of their importance and the MAIB performance. The survey considered 4 key areas of customer service:

- experience with the claims officer;
- MAIB's documentation;
- MAIB's procedures; and
- rehabilitation issues.

The survey concluded that *"current overall satisfaction is somewhat higher than in the previous round of research, with high average performance scores achieved for all of the 33 elements within those 4 areas"*. Of the 33 elements, all received higher satisfaction scores in 2011 than in 2009. Overall the MAIB achieved its 85% target, with overall satisfaction scores for each element ranging from 84% to 93%.

#### 4.4 Relevant Comparisons

##### 4.4.1 Pricing

The operations of other Australian MA insurers are most relevant for comparisons of pricing levels and structure. MA insurance is not a generic product however, which makes comparison of pricing levels difficult. Each Australian jurisdiction has different compensation arrangements for persons injured in motor accidents. The type and level of compensation provided are key determinants of the cost. In addition, because MA insurance is compulsory, State and Territory Governments exert varying degrees of control over the level of premiums charged to motorists even where these premiums are provided in the private sector.

Pricing comparisons are provided in this submission and as far as possible the relevant issues in making those comparisons have been identified.

##### 4.4.2 Financial Operations

The financial operations of the MAIB can be compared with those of private sector general insurance companies and other Australian MA insurers. Once again, care is needed in making these comparisons as financial operations differ with the type(s) of insurance provided. These comparisons are summarised in the following Section.

## 5 MOTOR ACCIDENTS INSURANCE IN AUSTRALIA

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### 5.1 Purpose of this section

This section of the submission provides:

- an introduction to the characteristics of MA insurance;
- an overview of MA Insurance in Australia, highlighting key differences in arrangements;
- an overview of the benefits/compensation provided to persons injured in motor accidents in Tasmania;
- interstate comparisons, highlighting key differences in compensation; and
- an overview of developments in each interstate scheme since the 2009 GPOC investigation.

### 5.2 Characteristics of Motor Accidents Insurance

The term Motor Accidents (“MA”) insurance is used in this submission to describe the insurance provided to cover personal injury as a result of motor vehicle accidents. Another commonly used term is Compulsory Third Party (CTP) insurance.

MA insurance has certain features which distinguish it from other forms of insurance and which impact on the pricing and general financial operations of the organisations providing the insurance. These features include:

- the compulsory nature of the insurance;
- the importance of investment income in determining the cost of the insurance; and
- greater variability (risk) associated with providing MA insurance than many other types of insurance.

#### 5.2.1 Compulsory Nature

The Australian population generally regards the car as essential for a reasonable standard of living. MA insurance is compulsory for all motorists therefore the provision of that product can be considered an “essential” service similar to the provision of electricity, telecommunication and water services.

Like other “essential” services, **affordability** and the need for **stability** are key issues which impact on pricing policies.

### 5.2.2 Importance of Investment Income

Premiums are received at registration to cover the cost of any accident arising in the following period of cover. The claim payments relating to any such accidents may be made relatively quickly after the accident (in the case of minor claims), or over a very long period of time (for example, where care costs are payable throughout the lifetime of a seriously injured young person).

Considerable assets are therefore built up and held as reserves to meet future claim payments in respect of past accidents. The magnitude of assets and length of time before payment means that the level of investment income earned is a key component to providing cost-effective compensation.

The level of investment income earned must however be balanced against the risk associated with earning that income in order to ensure the security of assets.

### 5.2.3 Variability (risk)

Insurance is the business of transferring variability (or risk) from the insured to the insurer. By grouping risks, the costs become less variable and more predictable than had they remained with the individual. Different types of insurance contribute different levels of variability (risk) to the financial operations of the insurer.

Variability in financial operations arises because of the need to estimate claims costs and potential future investment income in the calculation of premium required and for the purposes of establishing outstanding claim liabilities. The greater the uncertainty of these costs the greater the risk to the financial operations of the insurer.

MA insurance, together with other liability classes such as Workers' Compensation, Medical Indemnity, Professional Indemnity and Public Liability are considered to be more variable classes of insurance. This is generally because of the longer term nature of the claim payment process, referred to as "long tail" insurance.

Claim payments may extend for many years after the initial premium is received. During that time factors may operate to impact on the eventual cost of that claim. These factors include such things as: the level of income earned by the insurer on the invested premium, changing court precedents, medical developments, general inflationary forces etc. The longer the period of time until final payment, the greater the chance that the initial premium may prove to be either inadequate or excessive.

## 5.3 Overview of Motor Accidents Insurance in Australia

Each State and Territory in Australia has its own MA insurance arrangements. The product is not generic, with the main differences arising in the areas of:

- private or public sector operation;
- eligibility for compensation:

- No Fault: compensation is provided to any person injured in an accident regardless of level of “fault” in causing the accident;
- Fault or Common Law: compensation is provided only to those who can demonstrate the fault of a third party;
- a mix of No Fault and Common Law.
- the form and level of compensation provided;
- procedures, dispute resolution processes etc; and
- the cost of the insurance (the premiums).

The table below summarises the key arrangements in each of the schemes operating in Australia.

**Table 5.1 Comparison of key arrangements in Australian MA schemes**

	TAS	VIC	NT	NSW	SA	QLD	WA	ACT
<b>Type of Insurer</b>								
- Public Sector	✓	✓	✓ <sup>1</sup>		✓ <sup>2</sup>		✓	
- Private Sector				✓		✓		✓
<b>Type of Compensation</b>								
- No Fault	✓	✓	✓ <sup>3</sup>	(✓) <sup>4</sup>	<sup>5</sup>			
- Common Law	✓	✓	(✓) <sup>3</sup>	✓	✓	✓	✓	✓
<b>Government involvement in pricing</b>	✓	✓	✓	✓	✓	✓	✓	✓

Notes:

1. The NT scheme is underwritten and managed by the TIO, the government owned state insurer.
2. The SA scheme is underwritten in the public sector, with management outsourced to a single private sector insurer
3. Effective 1 July 2007, all persons injured in NT are now eligible for No Fault benefits. Until 1 July 2007, non-residents were only eligible for Common Law benefits. Significant amendments to the Motor Accidents (Compensation) Act abolished Common Law
4. No fault cover is limited. NSW Government has established a new scheme (Lifetime Care and Support) to assist people with catastrophic injuries from motor vehicle accidents, regardless of fault. No-fault for children commenced 10/06 and no-fault for catastrophically injured commenced 10/07.
5. SA Government has proposed reforms to MA scheme, including the introduction of a No fault scheme in 2014. See section 5.6.

A more detailed summary of the MA schemes in Australia is provided in Appendix B. The following sections outline the compensation provided by the MAIB (Section 5.4) and provide a brief comparison with the benefits available in the other schemes (Section 5.5).

## 5.4 MAIB compensation arrangements

A brief description is provided below, followed by a comparison with the arrangements in other Australian jurisdictions.

#### 5.4.1 No Fault benefits

No Fault compensation includes:

- the cost of future care, medical, hospital, rehabilitation treatments etc required by the injured parties;
- a disability allowance as a partial replacement of lost earnings; and
- death and funeral benefits in the case of fatalities.

Once the MAIB has assessed eligibility, No Fault compensation can be readily provided as there is no requirement to prove liability.

Certain maximum dollar amounts or time periods are applied to the compensation provided for the majority of claimants. For more severely injured persons requiring daily care<sup>3</sup>, the Future Care component is designed to assist the individual in maintaining a reasonable quality of life into the future. The future care, medical, hospital and rehabilitation payments made to these claimants are not subject to any maximums.

No Fault compensation is paid as needed. This often involves more than one payment to or on behalf of a claimant and, in the case of seriously injured persons entitled to Future Care, may involve regular payments for the remainder of their lifetime.

#### 5.4.2 Common Law

Common Law arrangements provide for additional compensation where liability can be established against a third party. The Common Law system can award damages in respect of loss of earnings, non-economic loss (i.e. pain and suffering), future medical costs etc and legal costs in favour of the injured party.

Other than establishment of liability there are no eligibility conditions restricting who may sue for damages. The damages are largely unlimited, with the following exceptions:

- there is a \$4,000 threshold for access to general damages, with a sliding scale between \$4,000 and \$20,000 (these amounts are indexed); and
- the average earnings figure used in the calculation of future economic loss may not exceed a specified multiple of Average Weekly Earnings (the multiple for future claims<sup>4</sup> is 3.0).

Damages are valued allowing for the future effects of inflation, investment return and tax. This is done by applying a prescribed discount rate to the expected future damages. The discount rate was reduced from 7% per annum to 5% per annum as part of the *Civil*

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<sup>3</sup> Section 2(5) of the Act defines a person requiring "daily care" as follows: "A person requires daily care if, as a result of having suffered personal injury resulting directly from a motor accident, the person requires or is likely to require, daily care for at least 2 hours per day for an indefinite period, commencing not later than one year after the date of the accident".

<sup>4</sup> A maximum of 4.25 times AWE was introduced into the *Motor Accidents (Liabilities and Compensation Act)* on 1 August 2002. It changed to 3 times AWE as a consequential amendment to the *Civil Liability Act* with effect from 15 December 2005.

*Liability Amendment Act 2005*. This change is not retrospective, and applies to all accidents occurring from 15 December 2005.

### 5.4.3 Interaction between No Fault and Common Law compensation

There is often a period of several years between the accident and when a Common Law settlement is made. The delay is usually a result of requiring injuries to stabilise before damages are awarded and the requirement to establish liability. In the meantime, No Fault compensation is available, subject to legislative limitations.

Payment of Common Law damages is by way of a lump sum settlement, following which entitlements to No Fault compensation ceases (except Future Care benefits). Future Care costs are provided under the No Fault arrangements. However, except in special circumstances, liability for Future Care is not extinguished by a settlement at Common Law. There have been a small number of Common Law settlements where liability for Future Care has been extinguished by mutual agreement. In all cases the Future Care liabilities were small relative to the average Future Care claimant and the claimant barely met the future care requirement of two hours of care per day.

As part of a substantial review by the MAIB's actuary of the model used to estimate Future Care liabilities (conducted in October 2007 and June 2008), the settlement of Future Care claims at Common law was analysed. This review resulted in the inclusion of a Common Law settlement allowance when projecting the probability of termination of Future Care claims.

## 5.5 Interstate compensation comparisons

Appendix C summarises the compensation provided under each of the state MA schemes. Key points of difference are summarised below.

### 5.5.1 No Fault benefits

No Fault benefits are available in Tasmania, Victoria, the Northern Territory and to a limited extent in NSW.

The No Fault compensation provided in Tasmania is subject to fixed dollar limits for all claimants except those requiring "daily care"<sup>5</sup>. In Victoria and the NT, medical and rehabilitation costs are limited to a "reasonable" amount where "reasonable" is determined by the scheme.

There is no dollar excess on medical and rehabilitation costs for both the Tasmanian and the NT schemes, whereas Victoria applies an excess per family.

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<sup>5</sup> The aggregate limit for medical, hospital, rehabilitation etc payments is \$500,000. This limit does not apply to Future Care claimants, who are people requiring daily care for at least 2 hours per day for an indefinite period.

An income replacement benefit is payable in each of the No Fault schemes. Both Tasmania and Victoria pay 80% of earnings, subject to different maxima<sup>6</sup>. The payment in the NT is for loss of earning capacity, and is set at a fixed amount of 85% of NT AWE, reduced where there is capacity for work.

The income replacement benefit in Tasmania is limited to a period of 2 years, or 5 years if unfit for any work. Limits also apply in Victoria except for the most seriously injured claimants.

### 5.5.2 Common Law Benefits

Apart from the Northern Territory, all schemes provide some access to Common Law benefits. Common Law was available to non-residents of the Northern Territory prior to 1 July 2007.

Tasmania has no restrictions on who is eligible to sue for Common Law compensation (subject to the underlying requirement that fault can be established against a third party), and with the exception of a relatively low threshold for general damages and a relatively high limit on earnings used in the calculation of economic loss, no other limits apply.

The interest rate used to determine the lump sum present value of future damages varies between states<sup>7</sup>. The higher the interest rate, the lower the lump sum provided for the same level of future damages (all other things being equal).

### 5.5.3 Monopoly Scheme

NSW, Qld and ACT are privately underwritten schemes. The remaining schemes are monopolies.

## 5.6 Developments in other Australian MA schemes 2009 - 2013

Key developments in each of the schemes over the past 4 years are summarised below. A comparison of current premiums, price increases over the last 4 years and current measures of affordability are provided in Section 7.3.

### NSW

- Roads and Maritime Services data indicates that the number of registered vehicles in NSW rose from 4.8 million in June 2011 to an estimated 4.9 million in June 2012, an increase of 2.1 per cent;

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<sup>6</sup> The earnings figure used in the calculation of the Tasmanian benefit is subject to a maximum 3 times AWE. The earnings figure in Victoria is subject to a maximum, and is payable for 18 months before subject to a different formula.

<sup>7</sup> A discount rate of either 5% or 6% applies in most Australian jurisdictions. The exception is the ACT, which applies a discount rate of 3%. A change to 5% in the ACT was proposed as a part of the recent Amendment Act but the proposed change was rejected.

- The average premium for Sydney passenger vehicles is now around 36 per cent of average weekly earnings, compared with less than 30 per cent five years ago;
- The GFC and reductions in insurer yield rates have lowered insurer returns and caused premiums to increase;
- Claim frequency and propensity to claim (the proportion of CTP claims made following road casualties) has steadily risen since 2007, as has legal representation and the propensity to litigate;
- MAA rejected the premium rates filed by CTP insurers at the end of 2011;
- In response, MAA announced a review of CTP pricing to ensure the Green Slip Scheme remains equitable, affordable and sustainable into the future. This review may result in significant changes for current insurers;
- The MAA has been engaging with government and industry, including actuarial, health and legal professionals, and has indicated that an issues paper will soon be released;
- The funding ratio of the Lifetime Care and Support Authority of New South Wales (“LTCSA”) has declined over the four years due to the growth of the scheme; and
- On 17 February 2013, the NSW Government announced a decision to change the scheme to a no-fault basis with defined statutory benefits<sup>8</sup>.

#### Victoria

- Claim frequencies have continued to fall. Average claim frequency has decreased from 4.04 in 2007/08 to 3.77 in 2011/12 (claims per 1000 registrations);
- The 2007/08 actuarial release<sup>9</sup> was \$130 million (also released \$40 million 2009/10 and \$42 million 2010/11);
- The scheme’s funding ratio of 70.8% at June 2012 compared to 104.5% at June 2008. Target funding ratio is 100% over rolling five-year periods (reduced from 110%);
- Investment returns of only 4.2% during 2011/12 (compared to 10.9% in 2010/11), reflecting global turmoil; and
- In 2011/12, TAC invested \$94 million in road safety improvements.

#### South Australia

- On 10 July 2011 a number of amendments were made to the *Motor Vehicles Act 1959* to improve the equity and social responsiveness of the scheme while also contributing to the Government’s broader road safety agenda;

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<sup>8</sup> Reforms to the NSW Compulsory Third Party Green Slip Insurance Scheme, Catalogue No. MAA07, Motor Accidents Authority, February 2013

<sup>9</sup> Actuarial release is a term used to refer to a reduction in the cost of claims between successive actuarial assessments.

- Third party insurance premiums in South Australia have since 2000 grown at more than five per cent per annum, more than any state or territory;
- State Government proposing to make major changes to the scheme, including:
  - A new no fault scheme to deliver lifetime care and support to anyone catastrophically injured in a motor vehicle accident, irrespective of who was at fault. This will be funded from a catastrophic injury levy from July 2014, which will become part of CTP premiums;
  - New thresholds will be introduced to improve the overall affordability of the scheme;
  - Compensation for non-economic loss – pain and suffering – will be available to patients with an injury that exceeds 15 points on a 100 point scale of severity. The low threshold in the current scheme has been a key driver of the claim and legal cost pressures;
  - Compensation for past and future economic loss will be set at 80 per cent and damages for future economic loss will be available where the injury exceeds the 15 point threshold; and
  - Legal costs will not be reimbursed for minor injuries (claims of less than \$30,000). A maximum of \$2,500 will be reimbursed for claims between \$30,000 and \$50,000.
- During the first year of the changes, premiums are expected to reduce by about \$110. The first changes are due to come into effect on July 1, 2013.

#### Queensland

- Queensland had a reduction in premium due to removal of the HIH surcharge and the banning of the payment of CTP commissions and incentives effective October 2010;
- All six CTP insurers will increase premiums by \$5 from January 2013. The increase is attributed to the impact of declining bond yields on the sustainability of the scheme. Further premium increases may be necessary if bond yields remain low.

#### Northern Territory

- During 2010/11, TIO's funding ratio improved significantly following a 38% increase in net profit.
- The motor accident arm of the TIO Group conducted a Scheme Entitlements and Benefits Review in 2011. The 2007 Scheme amendments resulted in a strengthening of the Fund's position, which in conjunction with favourable claim trends in recent years, boosted the capacity to selectively increase benefits if warranted. The Review Recommendations are currently being considered by the Northern Territory Government; and
- During 2011/12, the motor accident arm posted only a \$0.5 million surplus, significantly impacted by external factors. Operating surplus from normal operations increased from \$40.1 million to \$47.4 million.

## Western Australia

- The premium for a family motor vehicle remains the lowest in Australia for the last 15 years;
- Solvency ratio reduced to 127.2% at 30 June 2012 compared with 137.1% at 30 June 2011;
- Net outstanding claims provisions were \$119.9 million worse at 30 June 2012 than forecast by an independent Actuary, primarily due to reductions in risk free discount rates;
- Investment returns for 2011/12 were only 2.9% and significantly lower than forecast; and
- As a step towards NDIS, in August 2012, the WA Premier, Colin Barnett, announced he is considering changing WA's CTP scheme to no-fault.

## ACT

- *The Road Transport (Third-Party Insurance) Amendment Act 2012* was passed in the ACT Legislative Assembly on Friday, 24 August 2012. The key provisions of the 2012 Amendment Act include:
  - new provision in relation to costs for awards of damages over \$50,000
  - provision to review the operation of the Act every 3 years
  - definition of non-economic loss for the purposes of the Act
  - guideline-making power to assist the courts in determining the appropriate level of damages for non-economic loss
- Premiums charged by NRMA Insurance will increase by 10% with effect from 1 September 2012.
- The main reasons for the increase are claims cost inflation and reduced investment yields.

Due to the long tail nature of the business, all MA schemes have been significantly impacted by low bond yields, with premium increases either required or being considered in order to maintain profit margins or solvency levels.

## 6 GENERAL INSURANCE – INSURANCE OPERATIONS

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### 6.1 Purpose of this section

This section provides an overview of the financial operations of a General Insurance company such as the MAIB. It outlines:

- the general principles used in pricing (that is, setting premiums);
- the importance of investment income;
- how financial viability is measured;
- sources of profit and how it is measured;
- issues associated with determining appropriate returns to shareholders; and
- the impact of taxation on costs and prices.

Other sections provide the associated details of the MAIB's operations in each of the above areas.

### 6.2 Overview of operations

The operations of a General Insurance company can be considered as comprising two parts, the *insurance* operations and the *investment* operations.

The insurance operations involve the following main components of income and expenditure:

- premium income;
- investment income on assets backing premium and claim reserves (often referred to as technical reserves); and
- claims and administration expenses.

### 6.3 Pricing

Sound insurance practice is to charge a premium which allows for:

- **the expected cost of claims** arising from incidents occurring during the period for which the insurance applies, discounted to allow for future investment earnings on the premium;

- **expenses** associated with assessing the risk associated with a policy prior to providing insurance, collecting premiums, assessing and paying claims, and general overheads; and
- **a target profit.**

$$\text{sound premium} = \text{expected discounted cost of claims} + \text{expenses} + \text{profit}$$

## 6.4 Break-even premium

The sum of the expected discounted cost of claims and associated expenses is generally referred to as the break-even premium. It is the premium required to meet all expected costs of providing the insurance. It does not include the profit loading.

$$\text{break-even premium} = \text{expected discounted cost of claims} + \text{expenses}$$

### 6.4.1 Expected discounted cost of claims

The expected cost of claims is usually determined based on assumptions regarding the expected claim frequency and average claim size. Allowance is also made for the impact of:

- expected future claims escalation which may increase the likely claim size; and
- anticipated investment earnings which may be earned on the premium between the time the premium is received and the time the claim payment is made.

The future cost allowing for inflation and investment earnings is referred to as the expected discounted cost of claims.

### 6.4.2 Profit

If actual claims, expense and economic experience eventuates as per the assumptions used in the calculation of break-even premium then the “insurance operations” will naturally break-even – i.e. no profit or loss will result. The only profit generated will be as a result of investment income on shareholders’ funds.

There is a level of risk associated with providing insurance. As a reward for taking this risk, shareholders require a greater return than that which can be achieved by investing in risk-free or lower risk investments. An additional return can only be generated if there is a profit from insurance operations. This can be achieved by including an explicit loading on the break-even premium, with the intention that this amount will not be required to meet claims costs or expenses and will eventuate as profit.

The appropriate level of target profit included in premium will depend on the overall rate of return on capital required and the level of capital held by the insurer. In particular, if an insurer is under capitalised then the underwriting profit will provide a relatively larger return on capital than if the insurer has capital at target or higher levels.

Discussion on profitability and rates of return are provided in section 13.

### 6.4.3 Risk rating

Risk rating refers to the practice of price differentiation for certain groups based on characteristics of that group. Certain characteristics are identified as generally being associated with lower than average claims costs. Groups exhibiting those characteristics are therefore considered a better risk and charged a relatively lower premium. Conversely, groups exhibiting characteristics identified as being associated with higher than average claims costs will tend to be considered as inferior risks, and will be charged a relatively higher premium. For example, in comprehensive motor insurance, younger drivers are often assessed as high risk and charged a higher premium.

The extent of price differentiation is strongly influenced by practical considerations such as:

- *size of the group* - the need to have groups that are large enough to provide a reliable indication of claims experience must be balanced against the risk that the group will be less homogeneous;
- *social acceptability* - for example, in Australia price differentiation for general insurance products on the basis of social demographics would most likely not be considered acceptable;
- *objective, clearly definable groups* - for example, classification on the basis of driving ability as good, medium and poor is impractical unless linked to such quantitative measures as “points” accrued as result of traffic infringements; and
- *administrative simplicity* - an excessive number of rating groups may cause processing problems.

The MAIB risk rating structure is the subject of Section 11.

## 6.5 Investment income

### 6.5.1 Investment strategy

As discussed in Section 5.2.2, investment income is a key factor affecting premium levels, profitability and financial viability of a MA insurer.

The quality and nature of the assets held will be a function of the insurer’s investment strategy. An investment strategy will consider such issues as:

- the likely returns to be achieved on the assets;
- the need for diversification to reduce the risk of poor returns;
- the security or risk of capital loss associated with particular assets; and

- the characteristics of the insurance provided, which may impact on such things as:
  - the need for liquidity in assets;
  - the need for growth in assets above inflation.

The majority of insurers invest in relatively mainstream assets such as high rated fixed interest securities, cash, listed equities, listed trusts and commercial property. The proportion of higher risk, higher return assets such as equities and property will vary depending on the type(s) of insurance written by the insurers and the insurer's attitude to the balance between risk and return.

## 6.6 Profitability

Actual profit arises from the following areas:

- any explicit loading for profit included in the premium;
- investment return on shareholders' funds; and
- differences between the actual experience in the areas of claims costs, expenses and investment income and that assumed in the calculation of premiums<sup>10</sup>.

Actual profitability in respect of premiums charged for a period of insurance can only be fully known after the last claim payment is made. In the case of the MAIB, this will not be for many years after the premium was written. For example, Future Care payments in respect of a young seriously injured person may continue for more than 50 years.

For "long tail"<sup>11</sup> insurance, profit in respect of a twelve month period can therefore only be an **estimate**. The claims expense in the period is **measured** for the purpose of the insurer's profit and loss account as the sum of:

- claims payments in the period; plus
- the change in the outstanding claims provision over the period.

It is possible for **actual profit** (as determined with hindsight) to eventuate at the level anticipated in the calculation of premium. In the period of time before actual profit can be recognised however, it is possible that **measured profit** may fluctuate considerably from year to year.

The concept of measured (temporary) profit and that of actual (permanent) profit needs to be considered when interpreting insurance profitability from published accounts.

<sup>10</sup> Favourable differences will contribute to profits, whereas unfavourable differences will erode profits.

<sup>11</sup> Long tail insurance is the term used to describe insurance that typically has a long term claim payment process. Liability classes of insurance such as MA insurance, workers' compensation, professional indemnity and public liability insurance are generally described as "long tail".

## 6.7 Returns to shareholders

The rate of return expected by shareholders will be determined by market returns achievable in other companies with a similar level of risk.

Dividend policy cannot be considered independently from premium levels, capital requirements and profitability. An appropriate dividend policy for an insurer will need to consider:

- the source of profit arising in any year and the extent to which calculated profit is a reflection of actual (permanent) profit or measured (temporary) profit;
- the extent to which retained profits may be required to build up capital to ensure adequate solvency; and
- the potential for volatility of profit and the outlook for the future.

Discussion on profitability and rates of return are provided in section 13.

## 6.8 Financial viability and Scheme solvency

Financial viability is referred to in the insurance industry as “solvency”. A solvent insurer is one which maintains capital at a level considered to be adequate by regulators (APRA in respect of private insurers) or by stakeholders (in the case of public sector insurers).

In the private sector, APRA has defined minimum capital requirements which reflect the risk profile of the insurer. Any insurer falling below the minimum standard is subject to investigation and potential closure. In practice therefore, private sector insurers hold additional capital above the minimum required to provide a buffer to absorb some of the variability associated with the business without falling below the minimum.

In the public sector, the issue of adequate capital is less clear. On the one hand, many public sector insurers have an explicit or implicit government guarantee, and it may be argued that this removes the need for further capital. On the other hand, some capital is desirable to provide a buffer against adverse experience. It may also be argued that operating without capital provides an unfair advantage to public sector insurers compared with private sector insurers. As a result, most public sector insurers have a target level of capital or solvency that has been agreed with stakeholders. However, this target level is often somewhat lower than would be required by a private insurer underwriting the same risks. This represents a practical compromise between the opposing arguments above.

## 6.9 Taxation

The MAIB is a Body Corporate under the provisions of the *Government Business Enterprises Act 1995*, and is not required to pay Commonwealth Government income tax. Under that Act, however, tax equivalent and capital gains tax equivalent payments are payable under the National Tax Equivalent Regime.

Prior to 2004/05 the Board had significant tax losses accumulated from earlier years which served to reduce any tax payments to nil. In subsequent years, tax payments have been volatile - primarily as a result of the volatility in the investment returns.

### 6.9.1 The New Tax System (Goods and Services Tax) Act 1999 - "TNTS/GST"

The introduction of TNTS/GST from 1 July 2000 impacted general insurance in a number of ways:

- prices were increased to reflect:
  - the impact of TNTS/GST on the underlying claims costs and expenses (generally a reduction); and
  - the 10% loading for GST;
- outstanding claim reserves were increased to reflect the net impact of TNTS/GST on the claims costs and expenses for older claims (generally an increase, as decreasing adjustments were not available for claims incurred prior to 1 July 2000)<sup>12</sup>; and
- unearned premiums were adjusted to allow for TNTS/GST.

The MAIB is able to claim an Input Tax Credit ("ITC") in respect of the GST payable on non-settlement costs (for example investigation, defendant legal, medical reports) where the supply is made to the MAIB. The ability to claim an ITC is affected only by the date of supply (it must be on or after 1/7/2000); it does not depend on the claim accident date.

The MAIB is also able to claim a decreasing adjustment mechanism ("DAM") on settlement costs in respect of claims arising from incidents after 30 June 2000. The amount of the DAM depends on the accident date:

- accidents 1/7/2000 to 30/6/2003 - DAM is equal to 1/11th of the settlement cost;
- accidents on or after 1/7/2003 - DAM is equal to approximately 69% of 1/11th of the settlement cost. Federal legislation provides for the MAIB to adopt the global decreasing adjustment methodology and the reduction to 69% is the result of applying that methodology; and
- All projections include GST and an allowance is made for GST-related recoveries as follows:
  - accidents up to and including 30/6/2000 - no recoveries. Some ITC's are available for non-settlement costs however due to the relatively small amounts involved, no attempt is made to quantify the ITC involved. As a result, liability estimates are expected to slightly overstate the ultimate liability.

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<sup>12</sup> The ACCC permitted insurers to increase premiums to recover the retrospective increase in outstanding claims provisions at 1 July 2000.

- accidents on or after 1/7/2000 and no later than 30/6/2003 - recoveries at 1/11th of expected future payments. This is the combined effect of ITC and DAM.
- accidents on or after 1/7/2003 - recoveries at 69% of 1/11th of expected future payments. This uses the DAM basis for ITC, and as such is considered to be slightly conservative.

Taylor Fry analyse payments inclusive of GST. Projected payment cash flows gross of GST are more useful as they reflect the actual flow of cash and the apparent cost of services. Therefore, all model assumptions (in particular payments per claim incurred for Scheduled Benefits and average settlement costs for Common Law) are GST inclusive. The gross outstanding claims liability is then reduced by the expected GST-related recoveries from ITC and the DAM.

## 7 HISTORICAL AND CURRENT PREMIUMS

### 7.1 Purpose of this section

This section provides a history of MAIB premiums, including commentary on the actual increases since the previous GPOC investigation in 2009.

A comparison of the current MAIB premium with the premiums charged by other MA insurance schemes in Australia, and the relative affordability, is also provided.

### 7.2 History of MAIB premium increases

A history of the premium charged by the MAIB for private motor vehicles is shown below.

**Table 7.1 Past MAIB premium increases for private cars**

Policy Year <sup>1</sup>	Class 1 Premium <sup>2</sup>	Change %	AWOTE %	Increase above AWOTE
	\$			
<b>1999/00</b>	259	8.4%	0.9%	7.5% <sup>3</sup>
<b>2000/01</b>	271	4.6%	3.6%	1.0% <sup>4</sup>
<b>2001/02</b>	288	6.3%	5.3%	1.0% <sup>4</sup>
<b>2002/03</b>	307	6.6%	5.6%	1.0% <sup>4</sup>
<b>2003/04</b>	324	5.5%	3.3%	2.2% <sup>3</sup>
<b>2004/05</b>	332	2.5%	4.9%	(2.4%)
<b>2005/06</b>	332	0.0%	4.6%	(4.6%)
<b>2006/07</b>	332	0.0%	4.8%	(4.8%)
<b>2007/08</b>	332	0.0%	3.6%	(3.6%)
<b>2008/09</b>	332	0.0%	4.5%	(4.5%)
<b>2009/10</b>	344	3.6%	3.6%	(0%) <sup>5</sup>
<b>2010/11</b>	344	0.0%	5.6%	(5.6%)
<b>2011/12</b>	344	0.0%	4.2%	(4.2%)
<b>2012/13</b>	344	0.0%	4.3%	(4.3%)

Notes:

1. The policy year begins 1 December
2. The premium is inclusive of GST (since 2000), but excludes duty (increased from \$6 to \$20 from 1 October 2012)
3. Increases related to the introduction of TNTS and GST and its impact on the cost of new claims
4. Increases as partial compensation for the impact of the introduction of TNTS and GST, and its impact on the outstanding claims liability (old claims).
5. Premium increase in 2009 was in accordance with the maximum premium increase allowed under the 2009 GPOC premiums order, which was based on a forecast increase in AWOTE of 3.5%, not actual AWOTE over the reference period.

The following comments are made in relation to past premium increases:

- Under the Act, premiums charged prior to 1996 were set to produce a break-even result in accounting terms, which meant that the premiums were inadequate to meet costs but were subsidised by investment returns on shareholders' capital. A 28% increase from 1 December 1996 largely rectified this;
- Two price adjustments were required to meet the increase in costs as a result of the introduction of TNTS/GST. The first was an increase of 5%, effective 1 December 1999, and associated with the introduction of GST from July 2000. The expiry of transitional provisions from July 2003 necessitated a second increase of 2.2% from 1 December 2003;
- The first GPOC review was conducted in 1997. The review made recommendations regarding maximum premiums for 1997/98 and the maximum increases for 1998/99 and 1999/00. The actual premium increases were in line with the recommended maxima:
  - 1998/99: Tasmanian AWOTE plus 2.5%;
  - 1999/00: Tasmanian AWOTE plus 7.5%, incorporating a 5.0% increase for TNTS/GST;
- The second GPOC review was conducted in 2000 and made recommendations regarding maximum premiums for 2000/01 and the maximum premium increases for 2001/02 and 2002/03 (Australian AWOTE plus 1.0% per annum). The additional 1.0% per annum increase was designed to provide additional funds to help strengthen the MAIB's solvency position, following the impact of TNTS changes on the outstanding claims liability<sup>13</sup>. Actual increases were in line with the maximum increases recommended;
- The premium increase for 2003/04 matched the recommended maximum premium from the 2003 GPOC review, and included a special 2.2% TNTS/GST-related adjustment;
- The premium increases in 2004/05 and 2005/06 were below the maximum premium increases in the Premiums Order established following the 2003 GPOC review;
- Between the 2006 and 2009 GPOC reviews there were no premium increases. The Premiums Order provided for increases in 2007 and 2008 based on the movement in AWOTE. However, based on actuarial advice, the Board did not increase premiums in 2007 or 2008. These decisions reflected a lower than expected cost per vehicle, resulting from a combination of factors;

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<sup>13</sup> As noted in the 2000 GPOC report, the introduction of TNTS increased the outstanding claims liability of the MAIB – that is, it effectively had a retrospective impact on past claims costs for open claims. The premium increase above AWOTE was designed "to compensate the MAIB for about one-third of the estimated \$16 million impact."

- Since the previous GPOC review, there has only been one premium increase. Premiums were increased in 2009 in accordance with the maximum allowed under the 2009 GPOC Premiums Order.

Note that the premiums shown in Table 7.1 are for Class 1 vehicles. The premiums for a number of other vehicle types have increased at rates greater than shown in Table 7.1 in line with the GPOC recommendations.

### 7.2.1 Premium increases since 2009

Section 37 of the ER Act charges the MAIB Board with the responsibility of determining the premium, subject to approval by the Regulator. In making its pricing decision each year, the Board considers a range of factors including:

- capital adequacy - the latest financial accounts and projected financial position;
- the advice of its actuary;
- the maximum premium increase under the Premium Order;
- affordability – premium as a percentage of average weekly earnings;
- the Board's desire to keep the profit margin in the premium within a reasonable range; and
- the Board's responsibility to balance the interests of all stakeholders.

The 2009 Premiums Order provided maximum premiums applicable from 1 December 2009 and for an increase in all premiums each 1 December thereafter equivalent to the annual change in the Average All Capital Cities Average Weekly Ordinary Time Earnings (AWOTE), except for:

- Classes 4, 5 and 20 (motorcycles) where the maximum premiums, excluding duty, be increased from 1 December 2010 by 2.9 per cent per annum plus the percentage change in AWOTE per annum;
- Class 6 (Taxis and Chauffeured Hire Cars) where the maximum premiums, excluding duty, from 1 December 2010 be increased by 4.7 per cent per annum plus the percentage change in AWOTE per annum; and
- Class 18 (Off-road and Recreational Vehicles) where the maximum premiums, excluding duty, be increased from 1 December 2010 by 18.9 per cent per annum plus the percentage change in AWOTE per annum until equal to Class 1, but that the MAIB take into account the impact on registrations of such an increase before implementing such a change.

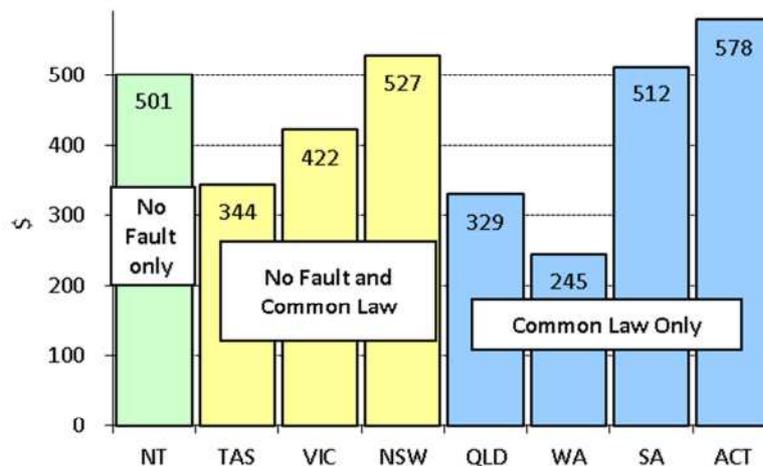
The MAIB increased premiums in accordance with the 2009 Premiums Order on 1 December 2009. However, based on actuarial advice, the Board did not increase premiums in 2010, 2011 or 2012. These decisions reflected a lower than expected cost per vehicle and higher than target level of profit in existing premiums.

## 7.3 Comparison with other schemes

### 7.3.1 Current market premiums

The chart below compares the 2012/13 premium for private motor vehicles for each of the MA insurance schemes operating in Australia.

**Chart 7.1 Comparison of metro private car premiums 2012/13**



Source: Scheme websites

Notes:

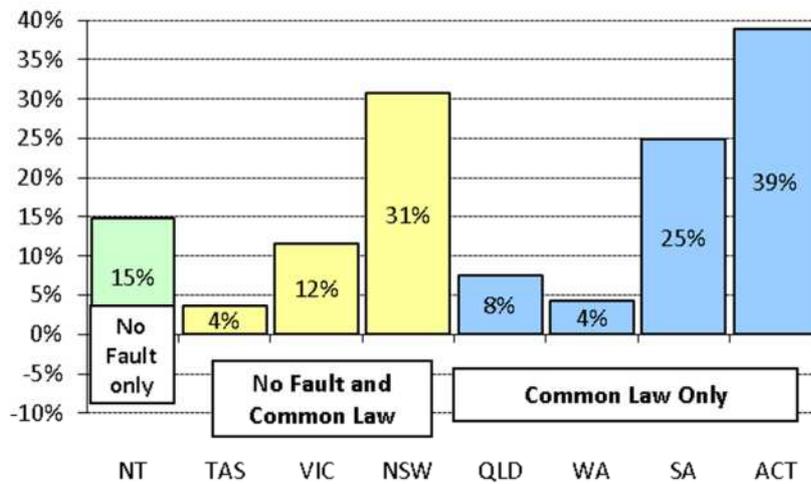
- All premiums shown exclude duty (at various levels) but include 10% GST.
- Premiums are for 2012/13.
- ACT premiums include a 10% increase effective September 2012
- QLD premiums include a recent \$5 increase

The chart shows that the Tasmanian premium for Class 1 vehicles is amongst the lowest in Australia. This observation is unchanged from the comparisons shown in the submissions to the 2000, 2003, 2006 and 2009 GPOC reviews.

### 7.3.2 Average premium growth since last GPOC review

The chart below compares the total premium increases for private motor vehicles during the past four years for each of the schemes in Australia.

**Chart 7.2 Growth in average private motor car premium for last four years**



**Notes:**

1. Four year comparison is for years 2009-10 to 2012-13 for all jurisdictions.
2. ACT premiums include a 10% increase effective September 2012
3. QLD premiums include a recent \$5 increase

The premium increases are affected by jurisdiction-specific factors, such as underlying profitability and changes to legislation. They also depend on the base from which increases are measured.

The 3.6% premium increase in Tasmania in the last four years is significantly less than the average across all Australian schemes (17%), including Victoria (12%), which operates with no-fault and common law benefits.

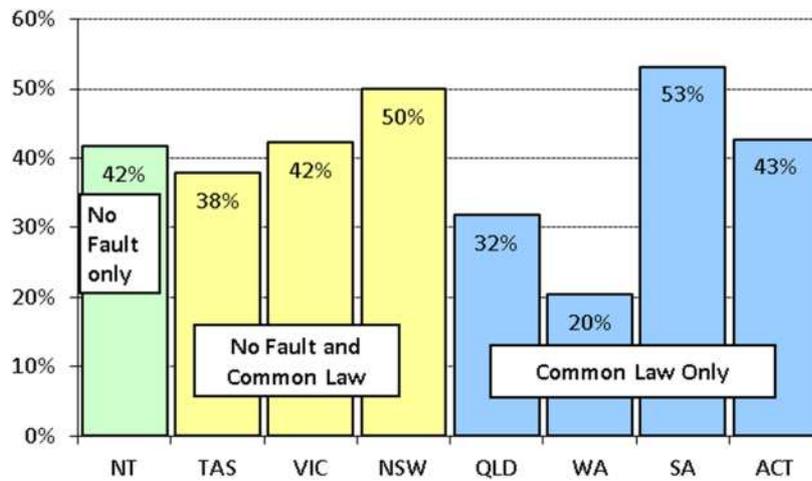
This has resulted in Tasmania continuing to have one of the lowest premium levels of all states.

**7.3.3 Affordability**

The chart below compares the “affordability” of private motor vehicle premiums for each Australian scheme. The affordability measure is the current premium for private motor vehicles (from Section 7.3.1) divided by Average Weekly Earnings for the same jurisdiction<sup>14</sup>.

<sup>14</sup> Average Weekly Earnings has been taken from the Australian Bureau of Statistics report 6302.0, May 2012,, using the index for All Persons Full-time Adult Total Earnings

Chart 7.3 Affordability (Premium as % of Average Weekly Earnings)



In general the “affordability” index ranges from 32% to 53%, with WA outside this range at a low of 20%. The index value for Tasmania is third lowest of the eight Australian jurisdictions.

## 8 BREAK-EVEN PREMIUM 2013/14

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### 8.1 Purpose of this section

The purpose of this section is to explain the general cost drivers which determine the break-even premium, and show the specific assumptions used in deriving the break-even premium for the 2013/14 year.

The break-even premium described in this section is based on a series of assumptions which are intended to be a likely estimate of costs, with no bias towards under or over estimation. These assumptions therefore form a base for considering future premium requirements. However, the maximum premium increases may take account of other factors, such as volatility of costs.

### 8.2 General cost drivers

General determinants of MAIB's insurance costs are as follows:

- claim frequency and average claim size for each of Common Law, Scheduled Benefits and Future Care claims;
- expenses associated with the MAIB's operations;
- rates of claim inflation and investment return – the former increases claims costs, whilst the latter reduces the amount of premium required to be collected upfront.

### 8.3 Break-even premium required

Taylor Fry has assessed that the estimated average **break-even** premium required for the period 1 December 2013 to 30 November 2014 is \$258<sup>15</sup>. The estimated break-even premium incorporates allowance for future inflation and is discounted to 31 May 2014, the mid-point of the period over which premium will be collected. The break-even premium does not include any profit margin.

This can be compared to an expected average premium to be **collected** during the year 1 December 2013 to 30 November 2014, prior to any increase at 1 December 2013, of \$287<sup>16</sup>. The premium to be collected includes a profit margin, to provide the MAIB's required return on capital. The implied profit margin before any premium increase is therefore 10%. The main assumptions and components of the break-even premium are derived by Taylor Fry by considering the trends and future outlook for key cost drivers. These assumptions and components are shown in the table below.

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<sup>15</sup> Excluding 10% GST and \$20 duty

<sup>16</sup> Excluding 10% GST and \$20 duty

**Table 8.1 Components of break-even premium**

Component	Assumption	Cost 2013/14 underwriting year	
		\$ million p.a.	\$ per vehicle
<b>Future Care Claim Costs</b>			
number of claims for 2013/14	8.0		
average cost 2013/14 (\$million) (inflated and discounted to 31/5/14; gross of GST)	4.076	32.6	67.4
<b>Common Law Claims Costs</b>			
claim frequency for 2013/14	1.68		
non-nil damages proportion	35%		
average non-nil cost 2013/14 (\$) (inflated and discounted to 31/5/14; gross of GST)	137,620	39.1	80.8
<b>Scheduled Benefit Claims Costs</b>			
claim frequency for 2013/14	5.88		
average cost 2013/14 (\$) (inflated and discounted to 31/5/14; gross of GST)	13,736	39.1	80.8
<b>Allowance for DAM's <sup>2</sup></b>	<b>(6.3%)</b>	<b>(7.0)</b>	<b>(14.4)</b>
<b>Sub-Total Claim Costs</b>		<b>103.9</b>	<b>214.6</b>
<b>Expenses</b>			
General & Admin (% claim payments)	6.5%	6.7	13.9
Collection Fees (% growth p.a)	1.0%	2.9	6.0
Reinsurance (% growth p.a.)	3.0%	6.5	13.4
<b>Sub-Total Expenses</b>		<b>16.1</b>	<b>33.3</b>
<b>Programs</b>			
Road safety (\$ million p.a.)	3.78	3.8	7.8
Injury PF (\$ million p.a.)	1.20	1.2	2.5
Motorcycle Safety (\$ million p.a.)	0.02	0.0	0.0
<b>Sub-Total Programs</b>		<b>5.0</b>	<b>10.3</b>
Real Investment Return	3.00%		
Number of registered vehicles <sup>3</sup>	483,923		
<b>Total <sup>1</sup></b>		<b>125.0</b>	<b>258.3</b>

Notes:

1. Inflated and discounted to 31/5/2014
2. 1/11th of 69% of claims costs, as described in Section 6.9.1
3. As at 30 November 2014. Assumes vehicle growth of 1% between 30 June 2012 and 30 June 2013 and 1.5% p.a. thereafter.

Section 9 identifies past trends in the key cost drivers and provides discussion as to how the assumptions for the break-even premium were selected.

## 8.4 Reconciliation of 2009 and 2013 break-even premium assumptions

The key assumptions used in determining the break-even premium for the 2009 review are compared with those assumed in this report in the table below.

**Table 8.2 Break-even premium assumptions reconciliation 2009 & 2013**

Component	Assumptions		Cost Per Vehicle		Change in Cost Per Vehicle (\$)	Contribution to Total Change (%)
	MAIB 2009 <sup>(1)</sup>	MAIB 2013	MAIB 2009	MAIB 2013		
<b>Future Care Claim Costs</b>						
number of claims for 2013/14	9.74	8.00				
average cost 2013/14 (\$million) (inflated and discounted to 31/5/14; gross of GST)	2.96	4.08	58.8	67.4	8.6	3.4%
<b>Common Law Claims Costs</b>						
claim frequency for 2013/14	2.05	1.68				
average non-nil cost 2013/14 (\$) (inflated and discounted to 31/5/14; gross of GST)	128,953	137,620	105.5	80.8	(24.7)	(9.8%)
<b>Scheduled Benefit Claims Costs</b>						
claim frequency for 2013/14	7.24	5.88				
average cost 2013/14 (\$) (inflated and discounted to 31/5/14; gross of GST)	8,393	13,736	60.8	80.8	20.0	7.9%
<b>Allowance for DAM's <sup>2</sup></b>	(6.3%)	(6.3%)	(14.1)	(14.4)	(0.2)	(0.1%)
<b>Sub-Total Claim Costs</b>			<b>211.0</b>	<b>214.6</b>	<b>3.6</b>	<b>1.4%</b>
<b>Expenses</b>						
General & Admin (% claim payments)	6.78%	6.48%	14.3	13.9	(0.4)	(0.2%)
Collection Fees (\$ per vehicle)	6.70	5.99	6.7	6.0	(0.7)	(0.3%)
Reinsurance (\$ million p.a.)	5.85	6.49	11.9	13.4	1.5	0.6%
<b>Sub-Total Expenses</b>			<b>33.0</b>	<b>33.3</b>	<b>0.4</b>	<b>0.1%</b>
<b>Programs</b>						
Road safety (\$ million p.a.)	3.49	3.78	7.1	7.8	0.7	0.3%
Injury PF (\$ million p.a.)	1.20	1.20	2.4	2.5	0.0	0.0%
Motorcycle Safety (\$ million p.a.)	0.04	0.02	0.1	0.0	(0.1)	0.0%
<b>Sub-Total Programs</b>			<b>9.7</b>	<b>10.3</b>	<b>0.7</b>	<b>0.3%</b>
Real Investment Return	4.0%	3.0%				<i>Included in claim size differences</i>
Number of registered vehicles <sup>3</sup>	489,766	483,923				
<b>Total <sup>1</sup></b>			<b>253.6</b>	<b>258.3</b>	<b>4.6</b>	<b>1.8%</b>

Notes:

1. Assumptions taken from 2009 MAIB submission, presented in Table 3.6 of 2009 GPOC report.
2. Change in cost per vehicle divided by total cost per vehicle on GPOC 2009 assumptions.
3. Claim sizes in inflated and discounted values at 31/5/2014. The GPOC 2009 assumptions were originally in 31/5/10 values, and have been adjusted for comparison purposes using movements in AWOTE and AWOTE forecasts for the period.

It can be seen that the break-even premium has increased by 1.8% from that assumed in the 2009 submission (after adjustment for inflation in the period). The reduction is the combined impact of a number of factors, some of which have produced increases in costs whilst others have produced reductions in the cost per vehicle:

- Claim frequency has again reduced despite indications in 2009 that the frequency was beginning to stabilise;
- However, the assumed cost per vehicle for Scheduled Benefits has increased due to a precautionary allowance for a doubling of hospital bed-day rates from 30 June 2013;
- The assumed cost per claim for Future Care has increased due to an allowance for an increase in care costs by FWA in a decision handed down on 1 February 2012. However, the overall assumed cost per claim has decreased as a reflection of continued favourable experience and in particular, due to a reduction in the projected number of incurred but not reported claims;
- The experience for Common Law has shown a reduction in the number of common law claims intimated and an overall reduction in the stock of open claims, offset in part by a higher than projected average settlement size;
- Overall there has been a slight decrease in expenses as a percentage of claim payments; and
- The break-even premium has increased due to the assumed real rate of return decreasing from 4% to 3% per annum. The decrease in real rates of return reflects the current and forecast economic conditions. In table 8.2, the impact of this change has been included in claim size differences.
- .

Section 9 provides further discussion on these aspects of claims and cost experience. The impact on the required break-even premium of changes to certain key claims cost drivers is provided in Section 10.

## 8.5 Break-even premium – economic basis

Privately underwritten schemes typically adopt real rates of return based on the difference between risk-free interest rates and claim inflation. The reason that they adopt current rates, rather than the long-term average approach adopted by the MAIB, is that insurers can enter and leave the privately underwritten markets. Thus, if an insurer perceives that premiums are uneconomic (for example, if they are based on assumed higher real returns than are available when the insurer invests the premiums), they will reduce market share or cease underwriting completely. If they perceive that premiums are based on higher estimates of underlying costs than they estimate (for example, if they are based on assumed lower real rates than are currently available), they will increase market share or new entrants will enter the market.

For that reason, privately underwritten schemes must constantly aim for economic premiums – where there is no additional source of expected profit or loss than is explicitly allowed for in profit margins. Premiums based on current market risk-free rates and claim inflation are referred to as economic premiums.

The consequence of this approach is that premiums tend to fall as expected real investment returns<sup>17</sup> increase and tend to rise as expected real investment returns decrease. Currently, the difference between risk-free interest rates and inflationary expectations is at historically low levels, with the result that premiums in privately underwritten schemes have increased in 2012.

For comparative purposes, we have calculated the break-even premium and implied profit margin in economic premiums - using the economic assumptions adopted in our December 2012 review. The combined effect of the decrease in discount rates and inflation assumptions is a weighted average “gap” between wage inflation and the risk-free rates of (0.72%) per annum for durations up to ten years and 0.89% per annum across all durations.

The estimated average break-even premium on an economic basis required for the period 1 December 2013 to 30 November 2014 is \$301<sup>18</sup>. The break-even premium does not include any profit margin.

As discussed in Section 8.3, the expected average premium to be collected during the year 1 December 2013 to 30 November 2014, prior to any increase at 1 December 2013, of \$287<sup>19</sup>. The implied profit margin based on economic premiums before any premium increase is therefore negative 5%.

The adoption of a stable long-term real rate of return of 3% per annum avoids fluctuations in premiums, which would be inevitable if premiums were based on current market conditions from time to time. The above estimate shows that the effect of using the stable long-term rate in the current economic climate is to produce a break-even premium that is \$43 lower than the economic premium (i.e. a break-even premium of \$301 based on current economic conditions versus a break-even premium of \$258 based on a real rate of return of 3% per annum).

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<sup>17</sup> Real investment returns are nominal investment returns minus inflation

<sup>18</sup> Excluding 10% GST and \$20 duty

<sup>19</sup> Excluding 10% GST and \$20 duty

## 9 TRENDS IN KEY COST DRIVERS

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### 9.1 Purpose of this section

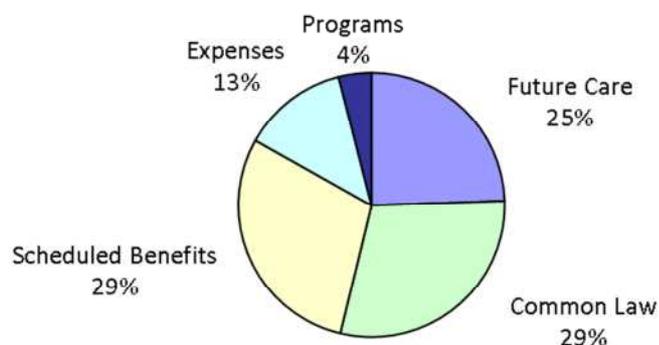
The purpose of this section is to look at past trends in the key cost drivers to:

- provide background as to how the assumptions used to determine the break-even premium in Section 8 were selected; and
- explain the movement from 2009 to 2013 in the assumptions underlying the break-even premium, as highlighted in Section 8.

### 9.2 Significance of components of break-even premium

The chart below shows the significance of each component in the break-even premium.

**Chart 9.1 - Components of break-even premium**



As expected, Scheduled Benefit, Common Law and Future Care claim costs dominate the break-even premium, comprising 83% of the total cost. Since the 2009 pricing review, Scheduled Benefits have increased as a proportion of the break-even premium as a result of the precautionary allowance for a doubling of hospital bed-day rates from 30 June 2013.

The sections below deal with the various components of the break-even premium in order of significance.

## 9.3 Common Law claims

### 9.3.1 Introduction

As part of its process for managing claims, the MAIB flags as a Common Law claim any claim considered to have the potential to give rise to the issuance of a writ. Over a period of around 18 months the MAIB reclassifies the claim status as more information on the nature of the incident and claim becomes known. This has the effect of reducing the number of Common Law claims from the initial intimated levels.

The projection of Common Law experience takes into account the following:

- The ultimate number of common law claims intimated. This provides a lead indicator of Common Law claim frequency and is considered to provide a sound base for monitoring and projection;
- The rate at which this common law potential is settled, separately considering “non-nil” and “nil damages” claims<sup>20</sup>. This separation allows a more detailed analysis of the trends in the common law claim portfolio. For example, it removes any distortion to the average settlement size from changes to the proportion of initial intimations which ultimately do not involve a common law action; and
- The average size of settled claims, together with the level of other common law costs (primarily legal and other investigation costs) for all “non-nil” and “nil” claims.

The trends in Common Law claim frequency (based on intimations), non-nil damages proportion, and average settlement size are examined below.

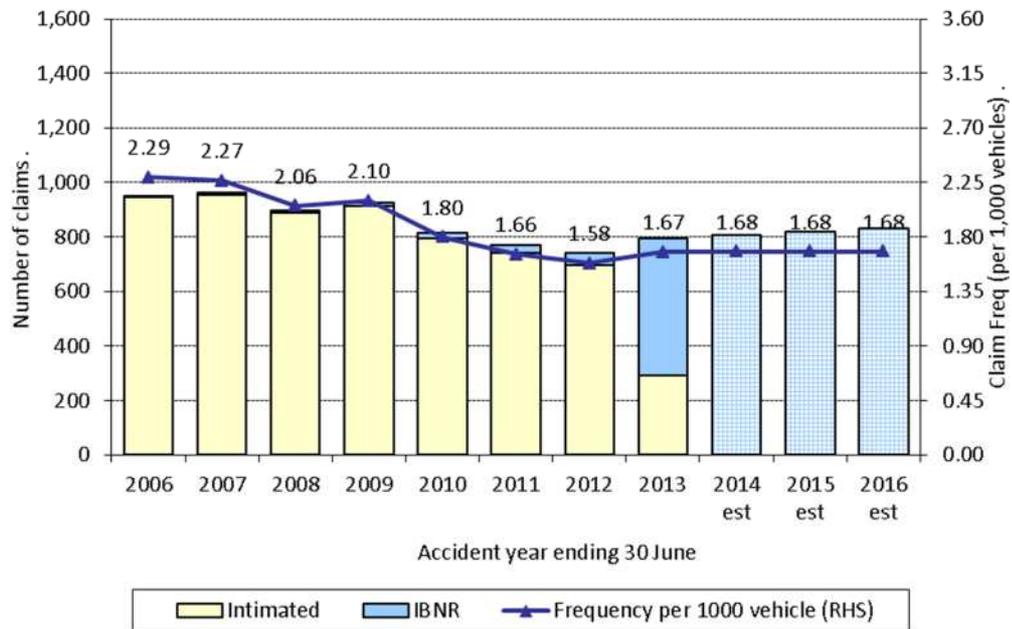
### 9.3.2 Common Law claim frequency

The chart below shows the historic number of intimated Common Law claims per 1,000 registered vehicles, together with the frequency assumed in the break-even premium basis. Note that the 2013 actual numbers intimated are those up to 31 December 2012, and the IBNR numbers relate to the whole year. Subsequent years are wholly projected and are noted on the graph axis as “est”. This format is repeated in subsequent graphs, where the years after 2013 are entirely projected and are shown as “est”.

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<sup>20</sup> “Non-nil” claims are those that ultimately receive a damages payment. “Nil” claims represent those intimations that ultimately do not receive a damages payment (although they may incur non-damages or non-common law payments); the bulk of these claimants do not ever initiate a common law action

Chart 9.2 Common Law claim frequency trend



The Common Law claim frequency reduced by 23% between 2008 and 2012. The reduction in claim frequency follows the reduction in frequency of General Claims, which is attributable to a range of factors including the impact of a series of initiatives introduced by the Tasmanian Government and by the MAIB funded Road Safety activities.

No allowance for further reductions in claim frequency has been made when determining future premium requirements. An objective of the Road Safety Taskforce initiatives is to achieve a sustained reduction in MAIB claims. Experience suggests that considerable expenditure is required to maintain an improved level of accident prevention, and it becomes harder and more costly to achieve further gains. Accordingly, we consider that it is inappropriate to build further gains into future maximum premium requirements until some evidence of the intended reductions is observed.

The claim frequency trend can also be affected by any changes in procedures used by the MAIB to identify potential Common Law claims (as the frequency is based on the number of claims ever identified as having Common Law potential, rather than only those that ultimately pursue action). Changes in procedures will occur from time to time and may produce either a reduction or increase in observed Common Law claim frequency.

### Premium assumptions

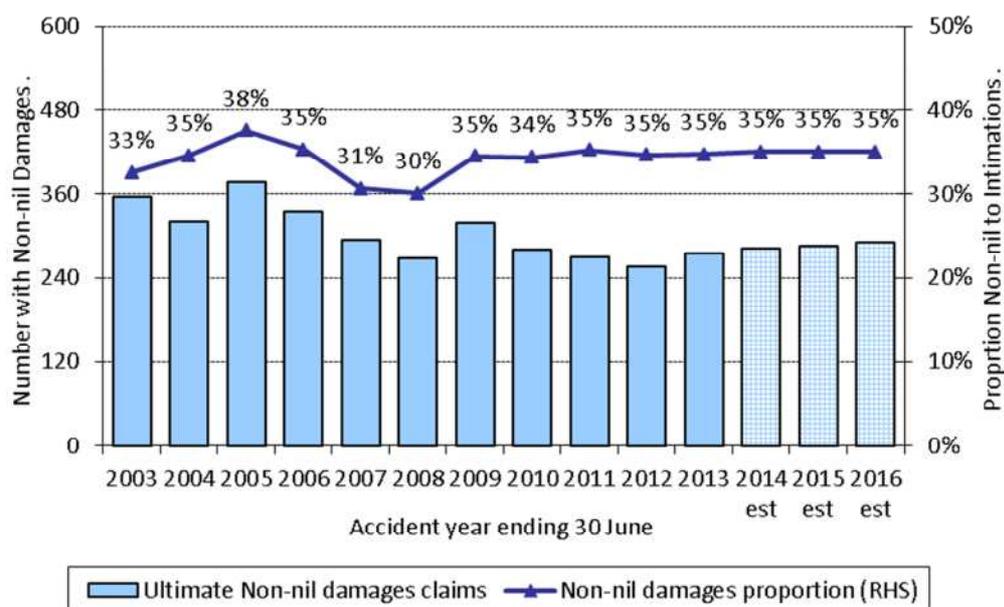
A Common Law claim frequency of 1.68 per 1,000 registered vehicles has been assumed in the actuarial calculations of break-even premium, consistent with recent experience.

The equivalent assumption at the time of the 2009 GPOC review was 2.05 Common Law claims per 1,000 registrations. The current assumption therefore implies an 18% improvement in Common Law claim frequency.

### 9.3.3 Proportion of Non-Nil claims

The chart below shows the proportion of intimated Common Law claims that are projected to receive a damages payment since 2002/03, together with the proportion assumed in the break-even premium basis.

**Chart 9.3 Non-nil damages Common Law claims**



The estimated proportion of Common Law intimations ultimately involving a damages payment has averaged 34% in the period 2003 to 2012. The assumed proportion for the break-even premium is 35%.

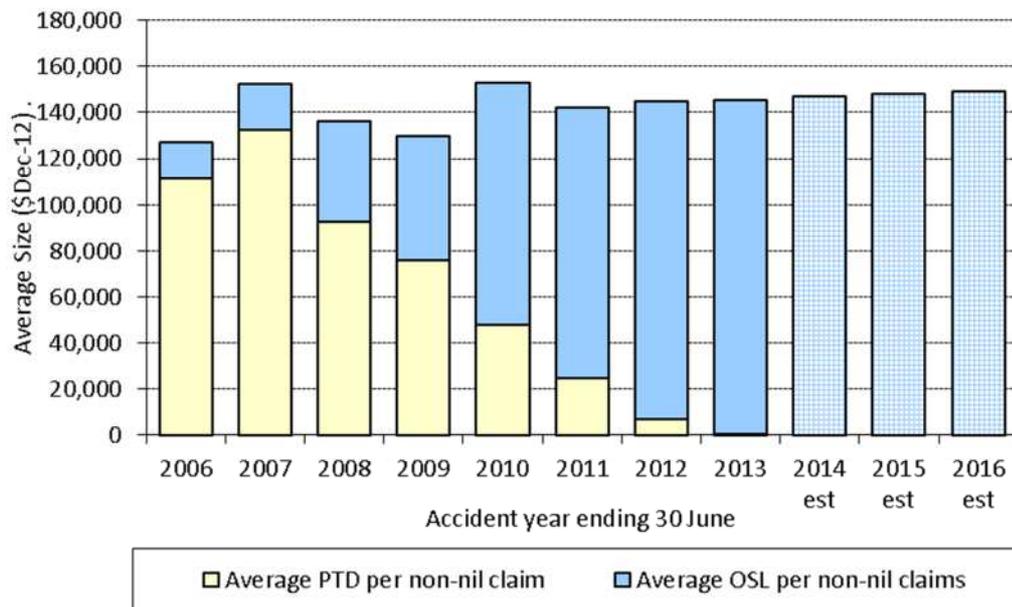
### 9.3.4 Common Law average claim size

The chart below shows the average estimated Common Law claim size (gross of GST) by accident year, together with that assumed in the break-even premium basis. The average size is measured across all Common Law claims expected to receive a damages payment<sup>21</sup> and is expressed in current values (i.e. 31 December 2012 values without allowance for future inflation and discounting). The average claim size shown in the chart is split into two parts:

- the average cost paid to 31 December 2012 (PTD); and
- the expected future average outstanding loss (OSL).

<sup>21</sup> As noted in Section 9.3.1 the average size is measured across those claims projected to receive a settlement, rather than all claims which, at some point, are considered to have common law potential.

Chart 9.4 Common Law average estimated claim size



We note the following in terms of movements in the average claim size:

- For recent accident years, only a small portion of the cost has been paid, the majority is outstanding and can only be estimated; and
- A common trend in MA insurance is the tendency for claim payments to increase at a rate faster than general community inflation. This is referred to as superimposed inflation. The increase in average claim size observed above may be attributable to superimposed inflation. Further discussion on superimposed inflation is provided in section 9.8.

#### Change to the prescribed discount rate for damages

The MAIB's 2006 submission summarised a number of key changes introduced as part of the *Civil Liability Amendment Act 2005*. From a pricing perspective, the most significant of these was the change in the discount rate used to determine the present value of amounts for future loss (including economic loss and medical expenses). This impacted on all accidents from 15 December 2005.<sup>22</sup> The discount rate affects the quantum of damages awarded. All other things being equal, a lower discount rate will increase the quantum. Taylor Fry have continued to adopt a higher average payment per claim finalised for accident quarters after December 2005.

<sup>22</sup> The change impacts all accidents occurring from 15 December 2005. The projections underlying the figures presented in this report use quarterly periods, and for convenience the amendment was assumed to take effect from 1 January 2006.

## Premium assumptions

The actuarial calculations of break-even premium incorporate an assumed average Common Law claim size inclusive of allowance for the change to the prescribed discount rate, GST and legal costs of \$137,620. This is inflated and discounted to 31 May 2014.

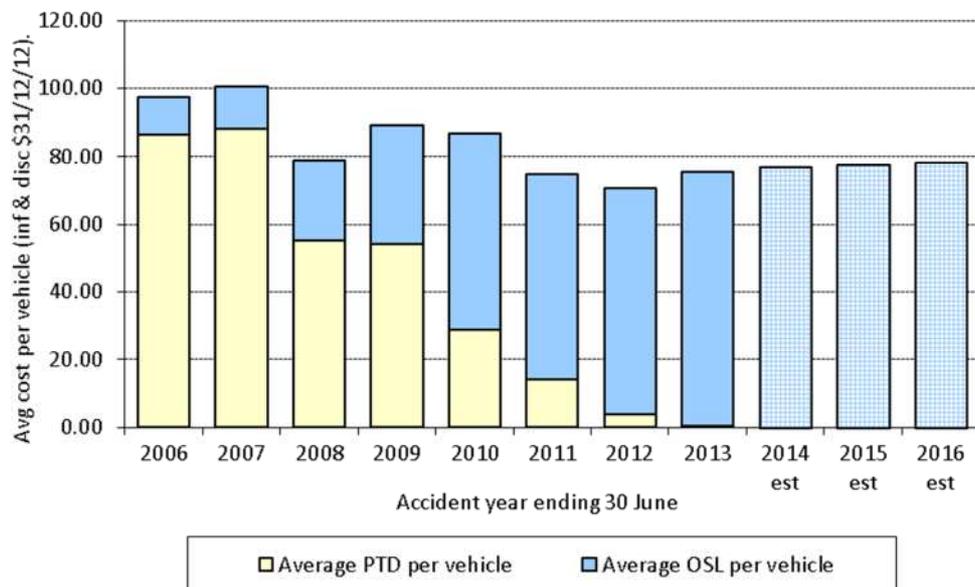
In line with the findings of an analysis of historical rates of claims cost growth, allowance has been made in the break-even premium for superimposed inflation<sup>23</sup>. Future Common Law claim costs are assumed to increase in line with AWOTE plus 0.75%. Refer to Section 9.8 for a discussion of superimposed inflation.

### 9.3.5 Common Law average cost per vehicle

The analysis of frequency, proportion of non-nil claims and average size can be combined to show the trend in the average cost of Common Law claims per registered vehicle. The following chart shows the analysis in inflated and discounted values, with adjustment to 31 December 2012 values<sup>24</sup> and gross of GST. The cost per vehicle is split into two components:

- the past average cost paid to date (PTD); and
- the expected future average outstanding loss (OSL).

**Chart 9.5 Average estimated Common Law cost per registered vehicle**



<sup>23</sup> Taylor Fry letters dated 28 October 2004 and 21 June 2007 containing analysis of historical rates of superimposed inflation for Common Law, Scheduled benefits and Future Care claim costs.

<sup>24</sup> The past and projected payments for each year are first discounted to the middle of the accident year. The inflated and discounted value for each year is then inflated to 31/12/12 values, in line with past increases in AWOTE. This helps to make the years more comparable.

It can be seen that Common Law claim costs per vehicle have reduced since the previous pricing review. This is as a result of the settlement of a higher than expected number of claims at nil cost and reductions in claim frequency shown in Chart 9.2.

The ultimate cost per vehicle for 2012/2013 to 2015/16 will depend largely on the ultimate number of non-nil claims (assumed to be 35% as shown in Chart 9.3).

The total estimated Common Law cost per vehicle for the break-even premium for 2013/14 is \$80.80<sup>25</sup>, as shown in Table 8.1. This is \$24.70 lower than the \$105.50 inflation-adjusted equivalent from the GPOC 2009 report (refer to Table 8.2) and this represents a 10% reduction in the 2009 estimated break-even premium.

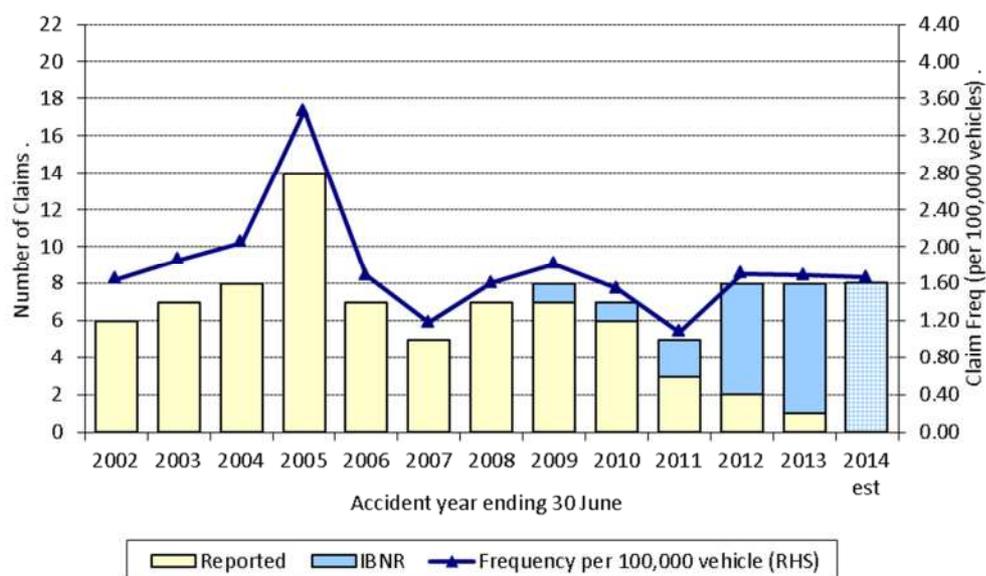
The reduction in the Common Law allowance in the break-even premium reflects the favourable experience in recent years. As discussed above, the observed result has been achieved through a higher proportion of Common Law claims ultimately resolved without damages payments and reductions in claim frequency, offset in part by a small increase in the assumed average claim size and an increase due to the reduction in the assumed real rate of return from 4% to 3%.

## 9.4 Future Care claims

### 9.4.1 Number of Future Care claims

The chart below shows the estimated number of Future Care claims arising in each accident year, together with the implied claim frequency. The assumption used in the break-even premium calculation is also shown.

Chart 9.6 Future Care claim numbers



<sup>25</sup> This is inflated and discounted, and expressed in \$31/5/14 values.

It can be seen that the number of Future Care claims has fluctuated between 5 and 14 claims per accident year. This may change depending on the numbers of IBNR claims eventually reported for more recent years. However, the chart shows that there has been considerable volatility in the frequency of Future Care claims.

Prior to 2007, the projection of Future Care claim numbers was based on an initial estimate of eleven claims incurred each year. The selection of eleven was consistent with a long-term average frequency of slightly more than 2.5 per 100,000 vehicles, which was suggested in a symposium on lifetime support for accident victims in March 2005, sponsored by the Transport Accident Commission (TAC).

A detailed investigation of the delay between accident and the classification of each claim as Future Care led to a reduction from eleven in the 2006 GPOC review to nine in the 2009 GPOC review. An update of this analysis during 2012 suggests that a reduction from nine to eight Future Care claims for a new accident year is now appropriate. Chart 9.6 supports this reduction.

An IBNR allowance has been included for all accident years less than four years from accident in line with the historical development of Future Care numbers. An IBNR allowance for earlier accidents years has only been retained where a potential claim has been identified. The MAIB database indicates that there are currently nine claims which are recognised as having Future Care potential.

#### 9.4.2 Average Future Care claim size

Future Care claims payments are made for as long as a claimant requires “daily care”, often for life. The payments depend on the level of care required. The cost of Future Care claims is therefore heavily dependent on the age of the claimant and the nature and severity of injuries incurred.

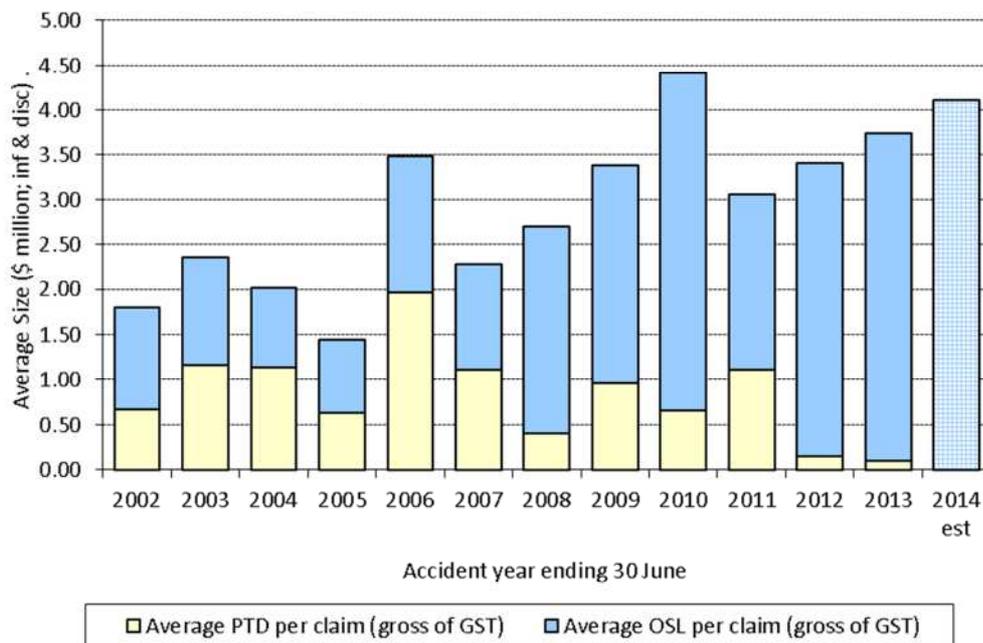
The cost of Future Care claims can only be estimated and is highly uncertain. Many factors can contribute to future cost increase for these claims, including deterioration in a claimant’s health, ageing of parental carers, and technological advances. The life expectancies of young claimants with catastrophic injuries are often unaffected.

The chart below shows the past average estimated cost of Future Care claims subdivided by accident year in inflated and discounted values, with discounting to the middle of the accident year<sup>26</sup>. The amounts are gross of GST and of future reinsurance recoveries.

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<sup>26</sup> The use of inflated and discounted values in the chart is different to the presentation of the average claim size for Common Law and Scheduled Benefits, both of which use current values (in \$31/12/08 values, without inflation and discounting). Whilst average sizes in current values are typically easier to compare across years, they can be misleading for Future Care because of the small number of claims and their highly individual nature. The assumption of the payment term for Future Care benefits is critical to the assumed cost, and hence the required premium. Illustration on an inflated and discounted basis is therefore most useful.

**Chart 9.7 Future Care estimated average claim size**



It can be seen that only a small portion of Future Care costs have been paid to date. The majority of the cost is estimated, even for older accident years.

The estimated average claims cost is highly variable, reflecting the relatively small number of claims in each year, and the widely differing prognoses and care needs of the individuals involved.

The example below illustrates the potential size (inflated and discounted) variability for individual claims:

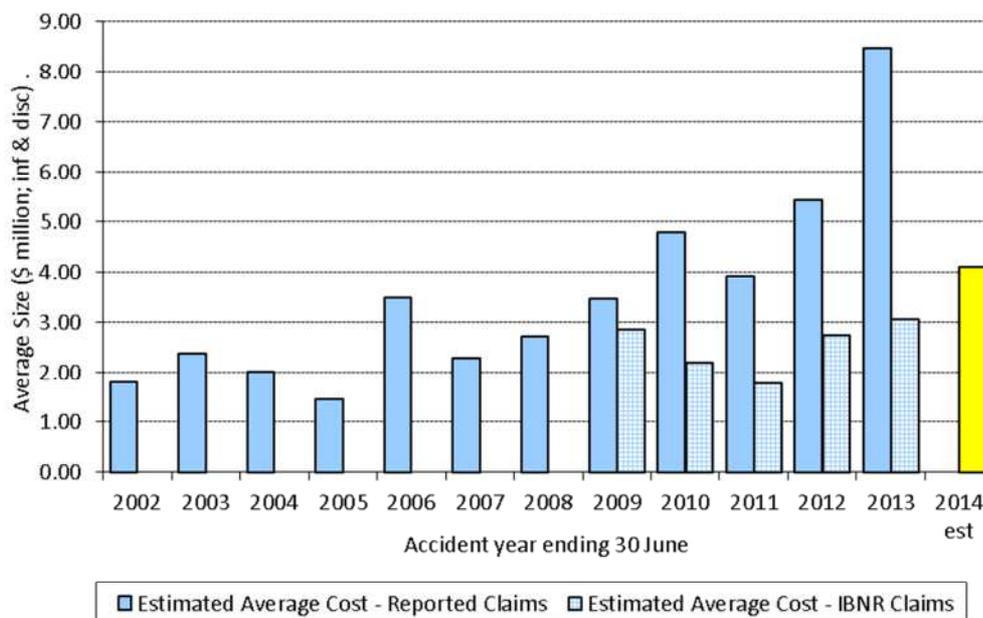
- costs for a 14 year old paraplegic may be expected to be around \$3 million; whilst
- costs for a 30 year old quadriplegic may be expected to be around \$8 million.

The size of claims reduces the longer it takes to classify them as Future Care. Clearly the most costly claims are those resulting from severe brain or spinal injury and these claims can be classified relatively quickly. The marginal claims often take several years for the care needs to be classified, and these are generally lower cost.

To allow for the termination of claims due to old age at accident or Common Law settlement, the allowance for IBNR claims also includes two different ages and one small claim per year with Common Law potential.

The average cost used for the break-even premium is \$4.08 million per claim. The assumed average size has been set based on the most recent experience of reported claims. The following chart separates the average size assumption for reported claims from the assumption for IBNR claims. This chart shows the inflated and discounted values, where costs have been discounted to the middle of the accident year.

**Chart 9.8 Future Care estimated average claim size**



It can be seen that:

- The estimated average cost of IBNR claims for older accident years is less than the average of reported claims - to reflect the reduction in the size of new Future Care claims as the delay increases. The average size of reported claims for the most recent two accident years appears high relative to earlier years. These averages are expected to decrease as more marginal claims are recognised as Future Care; and
- The average IBNR size for future years is greater than the estimated IBNR size of older accident years, reflecting the inclusion of the more severe claims reported within a year from accident.

### 9.4.3 Future Care Termination Rates

Future Care costs for some claims cease for reasons other than the death of the claimant. In 2007, a review was conducted of the causes of termination of each of the Future Care claims that had been finalised since the scheme began. From this review two future decrements were developed: a common law decrement and an old age decrement, which are applied according to the number of years of development of the claim since the accident. The old age decrement applies only to those whose age at accident was greater than 70. The experience showed that these claimants had a higher rate of cessation, sometimes connected with transfer of responsibility to Social Security. The common law decrement only applies to those claims which are less than \$2 million in size (in 30 June 2007 dollars). This is consistent with the MAIB's settlement practice.

### 9.4.4 Fair Work Australia Decision

Fair Work Australia ("FWA") awarded significant increases to carers in a decision handed down on 1 February 2012. The increases ranged from 19% for Level 2 to 41% for Level 8

carers and were to be applied in nine equal steps on 1 December each year, commencing in 2012 and finishing in 2020. In addition, FWA awarded cumulative annual loadings of 1% per annum over the first four years of the implementation period. The weighted average increase was 24% above CPI, spread over the nine years. The calculated break-even premium includes an allowance for this increase in Future Care care costs.

#### 9.4.5 Reinsurance recoveries

MAIB has had excess of loss reinsurance treaties covering its liabilities for most years since 1978/79. These contracts are assessed annually and provide “per event” cover for losses at levels that may vary from year to year. For 2011/12 the reinsurance contracts covered events in excess of \$7.5 million.

With such a high policy excess, reinsurance recoveries have been variable and few recoveries have been made in relation to recent years’ claims. Therefore, no further adjustment has been made to the assumed claim size. A net claim size equal to the gross claim size has been adopted.

#### 9.4.6 Premium assumptions

The break-even premium calculations incorporate allowance for eight Future Care claims.

The assumption of eight Future Care claims, discussed in section 9.4.1, represents an 11% decrease from the nine claims assumed for the 2009 GPOC review.

The resultant average claim size, from the analysis discussed in section 9.4.2 and 9.4.3, is \$4.08million (inflated at AWOTE with zero superimposed inflation and discounted to 31 May 2014, gross of GST, and net of potential future reinsurance recoveries). This is 38% higher than the average claim size assumed for the 2009 GPOC review, after adjustment for increases in AWOTE since 2009. This increase is due to the allowance for an increase in care costs as a result of the FWA decision and the reduction in the assumed real rate of return from 4% to 3%. Due to the long term nature of Future Care liabilities, a change in the assumed rate of return has a significant impact on the estimated claim size.

As indicated earlier, both the number and size of these claims is quite variable and therefore a significant component of the claims costs is quite uncertain. The assumptions given above are an expected mid-point with actual costs likely to vary significantly from year to year.

### 9.5 Scheduled Benefits claims

#### 9.5.1 Introduction

Taylor Fry model Scheduled Benefits based on the number of General claims reported, rather than just those receiving Scheduled Benefits. This provides a useful benchmark on the emerging claims volume, which is also a lead indicator of overall financial performance.

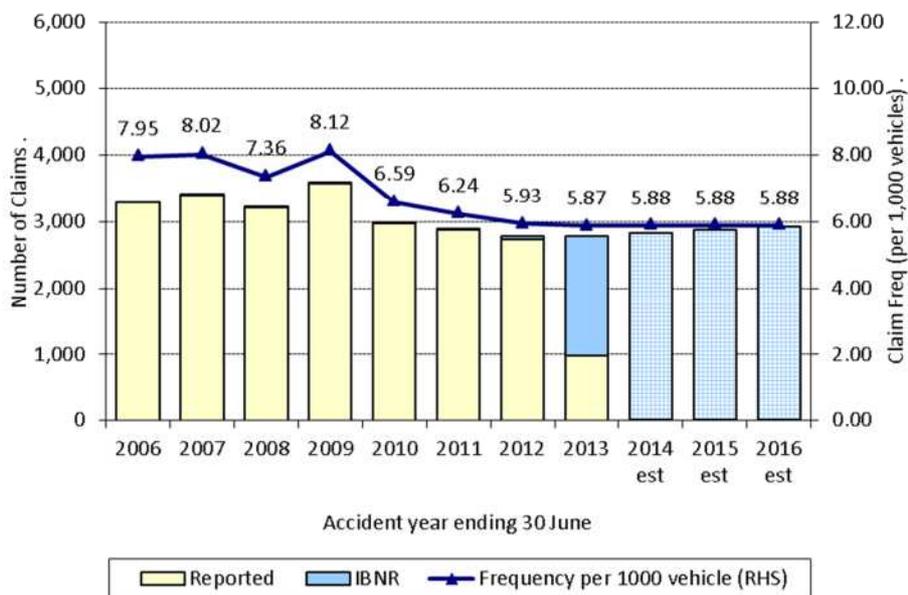
The number of General claims reported will exceed the number that ultimately receive Scheduled Benefits, as many claims are either denied, ineligible, do not pursue a claim, or are settled directly at Common Law.

The following analyses of the Scheduled Benefit claim frequency and average claim size are based on the number of General claims.

### 9.5.2 Statutory claim frequency

The chart below shows the historic number of General claims per 1,000 registered vehicles, together with the frequency assumed for the break-even premium basis.

**Chart 9.9 General claims frequency trend**



General claim frequency has improved significantly, reducing by a further 20% between 2008 and 2012. This improvement is at a similar level to the improvement in Common Law claim frequency (refer to Section 9.3.2) and is attributed to similar causes.

### Premium assumptions

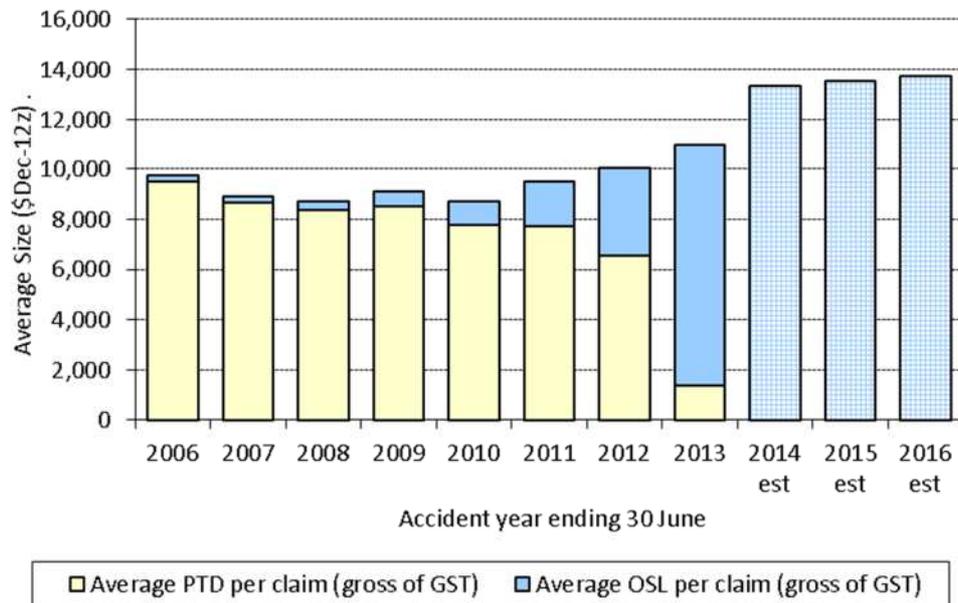
The General claim frequency for the 2013/14 year is assumed to be 5.88 claims per 1,000 vehicles. This represents a 19% reduction over the frequency assumed in the 2009 break-even premium calculations (7.24 per 1,000 registered vehicles).

### 9.5.3 Scheduled Benefits average claim size

The chart below shows the average estimated Scheduled Benefit claim size (gross of GST) by accident year, together with that assumed in the break-even premium basis. The average size is expressed in current values (i.e. 31 December 2012 values without allowance for future inflation and discounting).

The costs shown in the chart are split into two parts: the average cost paid to date (PTD) and the expected future average outstanding loss (OSL).

**Chart 9.10 Scheduled Benefits average estimated claim size**



It can be seen that:

- Compared to Common Law claims, a greater proportion of the claims cost for recent accident years is known. This is because Scheduled Benefits claims are paid more quickly than Common Law claims; and
- The significant increase in the projected average claim size between 2013 and 2014 is primarily a reflection of the allowance for an increase in hospital rates, discussed below.

### Hospital rate increase

The projected average claim size has been increased to reflect a large increase in hospital rates foreshadowed in a letter to the MAIB from the Department of Health and Human Services ('DHHS'). The letter advised the MAIB that the current hospital rate is too low, and will be increased following a move to a new funding model with the Commonwealth based on an efficient price for every service delivered.

Overall, analysis suggests that hospital costs account for approximately 35% of Scheduled Benefit costs. Until more information is available, a precautionary allowance has been made for hospital rates to double from 1 July 2013.

### Ambulance fees

The MAIB has been advised that it is to be charged for medical escort fees, where a medical escort is required to accompany a patient to the Royal Hobart Hospital or a

Melbourne Hospital. In addition, MAIB will be charged fixed costs on a proportionate basis for the retrieval service.

In addition, Ambulance Tasmania has commenced a fee review process. Ambulance Tasmania has advised that it will be seeking approval for fees increases averaging approximately 10% from the relevant body. They expect the approval process to take several months with fee increases, if approved, applicable from 2013/14.

Overall, it has been suggested that total Ambulance Tasmania fees may increase by up to \$500,000 per annum. This has been factored into the break-even premium.

#### Premium assumptions

The actuarial calculations of break-even premium assume an average Scheduled Benefits claim size of \$13,736 inflated and discounted to 31 May 2014, but gross of GST. Future claim costs are assumed to increase in line with AWOTE plus 1.5% p.a. (to allow for superimposed inflation) and a specific allowance for the increase in hospital rates and ambulance costs. The inflated and discounted average size for the latest estimate of the break-even premium is 64% higher than the equivalent assumption from the 2009 GPOC review, reflecting these unfavourable one-off adjustments.

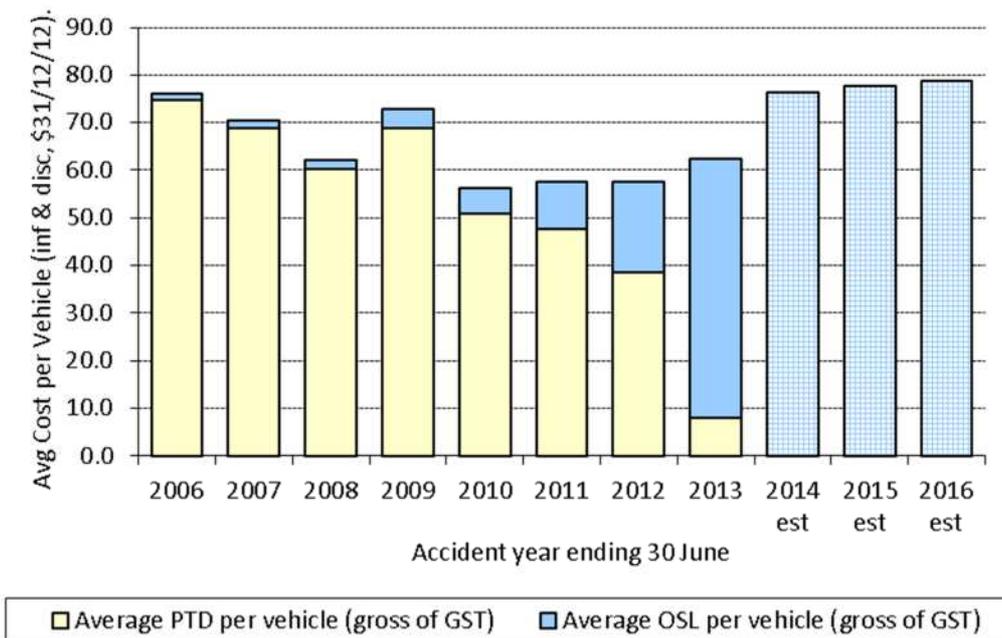
#### 9.5.4 Scheduled Benefit average cost per vehicle

As with Common Law, the analyses of the claim frequency and average claim size can be combined to produce the estimated past cost of Scheduled Benefits per vehicle. The chart below shows the average Scheduled Benefit cost per registered vehicle in inflated and discounted values, with adjustment to 31 December 2012 values<sup>27</sup>, together with that assumed in the break-even premium basis.

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<sup>27</sup> The past and projected payments for each year are first discounted to the middle of the accident year. The inflated and discounted value for each year is then inflated to \$31/12/08 values, in line with past increases in AWOTE. This helps to make the years more comparable.

**Chart 9.11 Average estimated Scheduled Benefits cost per vehicle**



It can be seen that the average cost per vehicle has decreased from around \$70 to below \$60 per vehicle due to claim frequency reductions, but is expected to significantly increase in 2014 due to the increase in hospital rates.

The total estimated Scheduled Benefits cost per vehicle for the break-even premium for 2013/14 is \$80.8<sup>28</sup>, as shown in Table 8.1. This is 7.9% higher than the \$60.8 inflation-adjusted equivalent from the GPOC 2009 report (refer to Table 8.2).

<sup>28</sup> This is inflated and discounted to \$31/5/14.

## 9.6 Expenses

The table below provides a history of the level of expenses incurred by the MAIB in the last nine years.

**Table 9.1 MAIB expense history**

	Year ending 30 June								
	2004	2005	2006	2007	2008	2009	2010	2011	2012
	\$000	\$000	\$000	\$000	\$000	\$001	\$002	\$003	\$004
Written Premium (excl SD and GST)	105,909	113,109	119,518	120,589	124,370	126,265	133,152	138,310	139,271
Claim Costs (net of GST)	96,639	107,867	94,168	95,774	58,637	74,235	100,093	133,559	200,666
<b>Expenses</b>									
General and Administration	4,522	4,163	4,514	5,657	4,887	5,629	5,888	5,790	6,121
Reinsurance	4,627	4,159	4,711	4,774	4,979	5,139	5,272	5,344	5,448
Road Safety Task Force	2,250	2,285	2,425	2,665	2,800	3,015	3,240	3,400	3,480
Road infrastructure				1,000	405	1,581	635	0	0
Injury Prevention & Mgt Foundation	696	747	1,024	912	746	906	947	687	698
Motorcycle safety strategy					193	10	77	8	3
Agency Costs	2,284	2,236	2,293	2,395	2,471	2,427	2,493	2,637	2,642
<b>Total Expenses</b>	<b>14,379</b>	<b>13,590</b>	<b>14,967</b>	<b>17,403</b>	<b>16,481</b>	<b>18,707</b>	<b>18,552</b>	<b>17,866</b>	<b>18,392</b>
<b>Expenses as % written premium</b>									
General and Administration	4.3%	3.7%	3.8%	4.7%	3.9%	4.5%	4.4%	4.2%	4.4%
Reinsurance	4.4%	3.7%	3.9%	4.0%	4.0%	4.1%	4.0%	3.9%	3.9%
Road Safety Task Force	2.1%	2.0%	2.0%	2.2%	2.3%	2.4%	2.4%	2.5%	2.5%
Road infrastructure	0.0%	0.0%	0.0%	0.8%	0.3%	1.3%	0.5%	0.0%	0.0%
Injury Prevention & Mgt Foundation	0.7%	0.7%	0.9%	0.8%	0.6%	0.7%	0.7%	0.5%	0.5%
Motorcycle safety strategy	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.1%	0.0%	0.0%
Agency Costs	2.2%	2.0%	1.9%	2.0%	2.0%	1.9%	1.9%	1.9%	1.9%
<b>Total Expenses</b>	<b>13.6%</b>	<b>12.0%</b>	<b>12.5%</b>	<b>14.4%</b>	<b>13.3%</b>	<b>14.8%</b>	<b>13.9%</b>	<b>12.9%</b>	<b>13.2%</b>

The following observations are made:

- total annual expenses have increased by \$4.0 million between 2003/04 and 2011/12. However, general and admin expenses have only increased by about \$1.6 million;
- the total expense rate, as a percentage of written premiums, has remained reasonably steady over the past nine years; and
- the reinsurance premium is one of the most significant items of expenditure (as discussed in Section 9.6.2).

### 9.6.1 Acquisition (Agency) Fees

With the exception of NSW, all MA schemes utilise the state registration authority to collect premiums. The collection fee charged to the MAIB by the Department of Energy Infrastructure and Resources is currently \$3.95 per certificate, inclusive of merchant fees, effective 1 July 2012. This is the same fee as payable in WA. The MAIB also pays \$0.25 per collection for the Uninsured/Unregistered project with DIER. Therefore, the total per collection is \$4.20 plus GST.

Care is required in interpreting the agency fee figure for the MAIB as more than one premium collection fee is incurred for vehicles that elect a periodic registration (although they are counted only once in the annual vehicle count). A surcharge is payable for periodic registrations to meet the cost of the additional collection fee and to reimburse the MAIB for foregone investment income (the surcharge is discussed in Section 11.5.1). This surcharge is designed to be revenue neutral, and as such the allowance for Agency Fees in the break-even premium is limited to one collection fee per annum.

The 2009 pricing allowance was \$5.84 per vehicle, which is equivalent to a current value of \$6.70 after adjustment for increases in AWOTE. The 2013/14 break-even premium includes an allowance for acquisition costs of \$2.9 million for the 2013/14 policy year. This equates to \$6.0 per vehicle and represents a 10% reduction from the previous pricing review.

### 9.6.2 Reinsurance

The cost of reinsurance will vary according to the nature and extent of reinsurance cover purchased. Reinsurance cover is defined by the amount of risk retained by the insurer and the amount of risk passed to the reinsurer. Small insurers and those with low levels of solvency will tend to retain less risk.

The net cost of reinsurance for 2013/14 is estimated to be \$6.3 million. For the purposes of forecasting, reinsurance premiums are forecast to increase at a constant rate per annum (on average) of 3.0%. In practice, the reinsurance premiums are renegotiated annually based on a number of factors (such as risk appetite and factors that generally impact on insurance premiums at the time).

Reinsurance premiums remain high and are unlikely to return to previous lower levels because of heavy losses sustained internationally by reinsurers as a result of the GFC and, more recently, natural disasters occurring in Australia, New Zealand and Asia. The MAIB will, however, look to leverage its improved claim frequency to achieve maximum value from reinsurance negotiations.

### 9.6.3 General Administration Expenses

Comparisons of general administration expenses are more difficult because the level of general expenses can be expected to vary with the type of compensation and the level of service provided.

In particular, schemes where Common Law compensation only is provided could be expected to incur lower costs than those with both Common Law and No Fault compensation. Common Law costs may also appear low as defendant legal costs, which

are an “administrative” type cost required to provide Common Law benefits, are usually classified as a claim cost rather than an administrative cost.

The assumed level of General Administration Expenses in the break-even premium is 6.5% of claim costs. This produces an administration cost allowance for the 2013/14 premium of \$6.7 million, or \$13.90 per vehicle. This is marginally lower than the \$14.30 per vehicle allowed in the 2009 GPOC review (after allowance for inflation in the period).

General administration expenses are projected for 2012/13 then assumed to increase roughly in line with AWOTE increases.

#### 9.6.4 Accident Prevention Expenses

Funds spent in an effective manner on accident prevention are an investment in reducing future claims and the costs associated with those claims. The analysis above shows that on a per policy basis, the MAIB spends a similar amount on accident prevention to Victoria.

The MAIB initiated the Road Safety Task Force (“RSTF”) in July 1996. The MAIB engaged Dr Jeremy Woolley of the Centre for Automobile Safety Research, University of Adelaide, to undertake evaluations of the RSTF in 1999, 2002, 2005, 2008 and 2011.

These evaluations have been positive. For example:

- The 1999 review concluded that *“the RSTF achieved a benefit for the Tasmanian community by lifting the profile of road safety”*. Up to a 25% reduction in serious injuries was attributed to the combined impact of the RSTF, and the increased presence of speed cameras.
- The 2002 review recognised that the second period of RSTF *“...has delivered on its objectives and every encouragement be given to those principally involved to maintain the momentum. This contrasts with other Australian jurisdictions trying to ‘regain the momentum’ ”*.
- The 2005 review concluded that *“Gains made in the previous two reviews had been consolidated and that continued funding would ensure that the current levels of public education and enforcement would not decline”*.
- The 2008 review concluded that *“The RSTF is contributing to reductions in road trauma on Tasmanian roads over time. Given that the RSTF represents the majority of road safety mass media presence and a quarter of the State’s traffic policing effort, funding should be continued.”*

Following the positive outcomes illustrated in the third independent assessment undertaken in 2005, it was decided to continue the investment for a further three year period from 1 January 2006 with increased funding of \$2.6 million (indexed at 5%) per annum.

Following the 2011 review, the MAIB accepted Dr Woolley’s recommendation for a continuation of funding, with \$3.48 million per annum committed for a further three years from 1 January 2012.

### 9.6.5 Motorcycle Safety Strategy

Initially, MAIB made a three year commitment of \$500,000 in total directed to a range of activities to enhance rider safety. The MAIB subsidised Motorcycle Road Skills Courses have continued beyond that period with the use of unexpended funds. The take up rate has been modest in the past year and additional promotion is taking place in 2012/13.

Under the Injury Prevention and Management Foundation, the MAIB has continued to provide subsidised refresher training for Tasmanian motorcyclists to improve their riding skills and decrease the likelihood of involvement in motor accidents.

### 9.6.6 Injury Prevention and Management Foundation (“IPMF”)

The IPMF is established under Section 13A of the Act. The objectives of the Foundation, which was launched in 1994, are:

- to promote and advance road safety, the prevention of motor accidents and the prevention of personal injury as a result of motor accidents;
- to conduct or support public awareness programmes in respect of the treatment of motor accident victims;
- to advance and support medical and technical research;
- to promote and advance techniques for the treatment of motor accident victims at the scene of the accident, during transportation to a hospital or other medical facility and after arrival at a hospital or other medical facility;
- to educate and support the carers of motor accident victims;
- to support organisations that care for motor accident victims; and
- to provide for the administration of the Foundation.

The IPMF provides recurrent funding to a number of organisations<sup>29</sup>, and grants for special projects. The recurrent funding is overseen by the IPMF Charities Committee, which was established in January 2002. The purpose of the IPMF Charities Committee is to:

- distribute IPMF funds provided by the MAIB to support organisations looking after motor accident victims;
- ensure the nominated organisations are accountable for the allocated funds; and
- ensure a co-ordinated approach to meeting the needs of motor accident victims.

Funding for the IPMF is determined by the MAIB Board and, under Section 13D (3) of the Act, may be up to 1% of gross premium each year.

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<sup>29</sup> These include Brain Injury Association of Tasmania; Headway North West Inc; Headway Support Services – Southern Region; Road Trauma Support Team; Tasmanian Acquired Brain Injury Service Inc; and Paraplegic and Quadriplegic Association of Tasmania Inc.

## 9.7 Economic Assumptions

The required level of premium is highly sensitive to the assumed future level of investment return and claims inflation. This is primarily a result of the long term nature and high cost of the Future Care claims.

The key aspects that are important in selecting reasonable economic assumptions are:

- A long term view of future economic assumptions must be taken in determining the value of the break-even premium.
- The investment return and claims inflation assumed are in relation to all claims costs arising from accidents that occur in the premium year, but for whom claim payments may be made over a period of 50 years or more. Whilst Scheduled Benefits and Common Law are, on average, paid relatively quickly (inflated and discounted mean terms of around 4.4 years and 2.7 years respectively), Future Care benefits are paid on average 20.5 years after accident; and
- It is the difference between investment return and claims cost inflation (the real rate of return) which is important in determining the value of the break-even premium, rather than the absolute values of either. This is discussed further in Section 9.7.3.

The premium assumptions adopted, and future issues associated with reasonable economic assumptions, are set out in the following sub-sections.

### 9.7.1 Investment Return

The calculation of the break-even premium incorporates allowance for investment earnings at an assumed rate of 6.6% per annum (3% above the weighted average forecast for Tasmanian AWOTE of 3.6%).

The average investment return over the eight years to June 2012 has been 5.8% p.a., but the individual year's returns have been volatile. The lowest return in the last five years has been a loss of 8.7% and the highest 14.3%. Further details of past MAIB investment returns is provided in Section 12.3.2. The volatility of past investment returns may be expected to continue in future, with resultant fluctuations in individual year's results and solvency. The investment return of (8.70%) for 2007/08 and (6.25%) for 2008/09 can be attributed to the global financial crisis.

Since the previous pricing review, the assumed rate of return above AWOTE has decreased by 1%. This is discussed further below.

#### Comparison with discount rate used in liability valuation at 31 December 2012

The valuation of outstanding claims liabilities as at 31 December 2012 uses a series of discount rates based on the risk free yields available at the valuation date<sup>30</sup>.

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<sup>30</sup> Risk-free yields have been used since December 2004. Between December 2001 and December 2004, the valuation discount rates were increased by an "asset margin" of 1.6% per annum. This margin was to allow for

An assumption is required for the discount rate beyond ten years as Australian Government bonds are not available for terms beyond about ten years. The approach that the MAIB and its advisors have taken is to consider a reasonable maintainable “gap” above the assumed rate of wage inflation, and “fix” that assumed gap for all years beyond fifteen. Taylor Fry’s advice is that a fixed gap of 2.0% is still a reasonable assumption in the current and foreseeable economic climate. This fixed gap is used for the outstanding claims liability valuation, which equates to a long-term discount rate of 5.6% per annum based on the assumed long-term rate of wage inflation of 3.6% per annum.

The investment earning rate assumed in the break-even premium calculation is 6.6% per annum, which is 3.0% above the assumed rate of inflation. This incorporates a margin above the risk-free rate used for the valuation of outstanding claims liabilities. This is considered appropriate as the MAIB’s investment philosophy is to maintain a balanced portfolio of assets, with an expectation that earnings will exceed the yields available on a risk-free basis.

The MAIB’s investment strategy has been established to achieve higher returns through a diversified portfolio, with weights determined by the term and risk profile of its liabilities. The resulting investment returns are expected to achieve a margin above wage inflation.

Section 9.7.3 discusses the assumed future margin above the assumed rate of inflation in light of the current economic situation.

#### 9.7.2 Average Weekly Ordinary Times Earnings (“AWOTE”)

Claims costs are assumed to increase in future in line with increases in Tasmanian Average Weekly Ordinary Times Earnings (“AWOTE”). This is considered to be the most appropriate index as the costs of most benefits are linked to costs that depend on services (medical, care, economic losses) rather than goods. The cost of services is in turn driven by the costs of people providing them, the largest of which is wages costs, and increases in wage costs are reflected by AWOTE.

It is clear that recent events in world financial markets and the responses to them have increased the risks of an economic slowdown, and in response, economists have reduced inflationary expectations. However, the resulting inflation forecasts exceed short-term risk-free rates, which is extremely unusual. For that reason, the current economic assumptions are considered somewhat anomalous, and some return to a more “normal” economic situation will restore a relationship where risk-free rates exceed forecast wage inflation. Unfortunately, it is not possible to say how long it will take for economic conditions to return to a more normal state.

The assumed future weighted average rate of increase in AWOTE determined by Taylor Fry is 3.6% per annum, based on independent economic forecasts and a Taylor Fry study of inflation forecasts. This rate is deemed by Taylor Fry as appropriate for use with an assumed investment return of 6.6% per annum (refer to the discussion in Section 9.7.3) and is the same as the weighted average rate assumed for the valuation of outstanding claims liabilities as at 31 December 2012.

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the higher returns that the MAIB’s investment strategy was expected to generate. The reasons for the removal of the asset margin are outlined in the MAIB’s 2006 submission.

### 9.7.3 Real Rate of Return

The difference between the assumed future rates of investment return and claims inflation (the “real rate of return”) is more important in determining the value of required break-even premium than the absolute value of either of the assumptions.

The assumed future real rate of return is 3.0% per annum. This represents a reduction of 1% from the 4% assumed by the MAIB in the 2009 pricing report. The assumed future real rate of return has varied as follows:

- 2000 report - 3.5%;
- 2003, 2006 and 2009 reports – 4%; and
- 1997 report - 4.5% per annum.

Historical experience of Australian MA schemes indicates that an average margin over the long term of 4%-6% per annum was achievable prior to the GFC. The lower end of the range corresponded with a reasonably diversified portfolio and the higher end of the range corresponded with a portfolio with a higher proportion of growth assets.

In the previous pricing review, the MAIB assumed a real rate of investment return (above wage inflation) of 4% per annum, consistent with the current diversified portfolio strategy. However, the MAIB’s asset consultant, Towers Watson, now consider a real rate of return of 3% per annum more appropriate, having regard to current and forecast economic conditions. Without increasing the MAIB’s risk profile, the view of the MAIB’s asset consultant is that a 4% real rate of return is only likely to be achievable with a low level of confidence (less than 50%).

In a letter dated 22 January 2013, the MAIB’s asset consultant, Towers Watson advised that:

- the current low, and likely somewhat persistent, yield environment creates challenges for long term investors with inflation linked liabilities who utilise bonds, in full or in part, to match or immunise their liability profile;
- Towers Watson’s modelling of MAIB’s strategic and current portfolio (with allowance for dynamic tilts) both reveal a median real return of 3.1% per annum over a 15 year period. This means that based on their assumptions, there is a 50% chance of achieving this outcome; and
- there is strong evidence that a real return assumption of 4% per annum coupled with an absolute return assumption for use in the Corporate Plan of 7.6% are only likely to be achievable with a low level of confidence (less than 50% in both cases).

As a result of this advice, which reflects the change in economic climate and future uncertainty, the real rate of return assumed in the break-even premium has been reduced from 4% to 3% per annum.

It is noted that during 2007/08 and 2008/09, the MAIB suffered its first investment losses. These two successive years of investment loss and a low investment return during 2011/12

as a result of continued economic turmoil, have significantly reduced the historic long run average return.

## 9.8 Superimposed Inflation

The term superimposed inflation is used to describe the growth in claims costs that is not explained by “normal” inflation (which in this case is represented by wage inflation) or other elements modelled explicitly. Sources of superimposed inflation include increased utilisation of more expensive services, and new precedents and heads of damage in common law awards.

Several investigations of growth in average claims cost have been undertaken by the MAIB’s actuarial advisors in recent years. Above-inflationary growth in claims costs has been evident in the MAIB experience, and assumptions for superimposed inflation have been built into the outstanding claims liability valuations since December 2001.

### 9.8.1 Assumptions for outstanding claims liability

The latest investigation into the presence of superimposed inflation in the MAIB claims experience was completed in April 2012. The actuary recommended that the superimposed inflation assumptions remain unchanged. The assumptions are shown in Table 9.4.

**Table 9.4 Outstanding claims valuation superimposed inflation assumptions**

	<b>Dec-01 to Jun-04</b>	<b>Since Dec-04</b>
Scheduled Benefits	1.50%	1.50%
Common Law	1.50%	0.75%
Future Care	1.50%	0.00%

The liabilities reported in the financial accounts as at 30 June 2012 incorporate the above superimposed inflation rates.

### 9.8.2 Assumptions for break-even premium

The break-even premium calculations incorporate allowance for superimposed inflation at the same rates as those assumed in the outstanding claims valuation and in the 2009 submission:

- Scheduled Benefits: 1.5% per annum;
- Common Law: 0.75% per annum; and
- Future Care: 0% per annum.

Superimposed inflation has been included in the pricing assumptions for a number of reasons:

- The October 2004 and June 2007 investigation indicated that there is underlying superimposed inflation in the long term in both Scheduled Benefits and Common Law;
- An investigation in April 2012 showed that current allowances for superimposed inflation produce no apparent trends towards over- or under-estimation of liabilities. On this basis, Taylor Fry did not recommend any change to current superimposed inflation assumptions;
- Cost control measures implemented by the MAIB have achieved savings in claims costs. It becomes progressively harder to both hold on to existing gains and find new sources of savings. In this environment it is prudent to price for the underlying upward cost pressure; and
- The history of personal injury insurance shows that extended periods of below-average growth in claims costs are typically followed by bursts of above-average increases (medical payments in particular).

The sensitivity analysis in Section 10 quantifies the impact on the break-even premium of variation in the superimposed inflation assumptions.

## 9.9 TNTS/GST Allowance

As discussed in Section 6.9.1, the MAIB is able to claim a Decreasing Adjustment of 1/11<sup>th</sup> of 69% claim payments. The break-even premium calculations make explicit adjustment for Decreasing Adjustments<sup>31</sup> at this level.

## 9.10 Interstate Vehicles

Each year the MAIB receives several hundred claims from people injured in motor vehicle accidents in Tasmania whilst they are an occupant of an interstate-registered vehicle. These claimants may be eligible for Scheduled Benefits from the MAIB if:

- the claimant is ineligible to claim under the scheme applying in the jurisdiction in which the vehicle is registered; and
- the accident also involved a Tasmanian-registered vehicle.

The 2006 MAIB submission addressed the concern expressed that these claims may be imposing a growing financial strain on the scheme. Analysis showed that a high proportion of claims of this type are rejected, most because they are eligible under a different scheme (drivers of Victorian-registered vehicles, for example, are eligible under the TAC scheme in Victoria) or are in single-vehicle accidents (and hence do not involve a Tasmania-registered vehicle). Further, in a number of cases where the claimants are eligible for benefits, the

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<sup>31</sup> The MAIB is entitled to claim Input Tax Credits, rather than a decreasing adjustment for certain payments (where the supply is made to the MAIB). The distinction is not considered material for the purposes of the calculation of the outstanding claims liability and the break-even premium.

MAIB is able to recover from an interstate insurer as it can be established that the driver of the interstate-registered vehicle is at least partially at fault.

No premiums are collected in respect of these claims, and so an increasing proportion represents a potential strain on the collected premium pool. This may be as much as a 0.5% addition to Scheduled Benefit costs.

## 10 BREAK-EVEN PREMIUM SENSITIVITY ANALYSIS

### 10.1 Purpose of this section

This section provides an indication as to the sensitivity of the break-even premium to changes in certain key assumptions, and highlights additional issues that may impact on future break-even premium requirements.

### 10.2 Sensitivity to assumption changes

The table below gives an indication of the impact on the calculated break-even premium of changes to the assumptions regarding the key cost drivers.

**Table 10.1 Sensitivity analysis of break-even premium calculations**

Components	Movement in breakeven premium			
	Optimistic		Pessimistic	
	\$	%	\$	%
<b>Superimposed Inflation</b>				
- rate per annum; Base = 0% FC, 0.75% CL, 1.5% SB				
- Optimistic = 0% for all, Pessimistic = 1.5% for all	(7)	(2.6%)	30	11.7%
<b>Common Law claim costs</b>				
- claim frequency (per 1,000 vehicles); Base = 1.68				
- Optimistic = 1.38, Pessimistic = 2.05	(14)	(5.2%)	17	6.5%
- Average claim size; Base = \$137,620				
- Optimistic = 10% reduction, Pessimistic = 10% increase	(8)	(2.9%)	8	2.9%
<b>Scheduled Benefits claim costs</b>				
- claim frequency (per 1,000 vehicles); Base = 5.88				
- Optimistic = 4.78, Pessimistic 7.24	(14)	(5.5%)	18	6.8%
- Average claim size; Base = \$13,736				
- Optimistic = 10% reduction, Pessimistic = 10% increase	(8)	(2.9%)	8	2.9%
<b>Future Care Claims costs</b>				
- Claim frequency (claims p.a.); Base = 8				
- Optimistic = 5, Pessimistic = 15	(24)	(9.2%)	55	21.4%
- Average claim size; Base = \$4,076,387				
- Optimistic = 20% reduction, Pessimistic = 20% increase	(13)	(4.9%)	13	4.9%
<b>General Administration Expense Allowance</b>				
- % of claims costs; Base = 6.5% p.a.				
- Optimistic = 6.0%, Pessimistic = 7.0%	(1)	(0.4%)	1	0.4%
<b>Real Return</b>				
Base = 3% p.a, Optimistic = 4% p.a, Pessimistic = 2% p.a	(15)	(5.8%)	19	7.5%

Note that the individual sensitivities shown in the table are not additive as interactions would occur if various changes in assumptions were combined. Moreover, it has been observed in other schemes that some of these changes to assumptions would probably work in opposite directions (e.g. more claims often means a lower average claim size).

A discussion of the derivation of each of the optimistic and pessimistic assumptions is provided below.

### 10.2.1 Superimposed inflation

The estimated break-even premium includes allowance for superimposed inflation at different rates for different benefit types, based on analysis undertaken in October 2004, June 2007 and April 2012. The optimistic assumption corresponds to the MAIB being able to control superimposed inflation; the pessimistic assumption corresponds to higher rates than have been observed historically.

We note that no allowance has been made in the break-even premium basis for future superimposed inflation for Future Care claims, consistent with the findings of claims cost investigations undertaken in October 2004, June 2007, March 2010 and April 2012<sup>32</sup>. The April 2012 investigation showed that current allowances for superimposed inflation produce no apparent trends towards over- or under-estimation of liabilities. On this basis, the actuary did not recommend any change to current superimposed inflation assumptions.

However there is potential for emergence of additional cost pressures; Future Care benefits are paid over a very long period of time and there is exposure to above-inflationary growth both through broadening of the benefits covered and through claimants accessing more complex and costly services. Further, our general experience is that medical payments (in particular) are prone to exhibit bursts of superimposed inflation. The allowance for superimposed inflation is designed to cater for increased claims costs that cannot be directly attributed to any specific source. We have included specific adjustments for the increase in care costs due to the FWA decision and the increase in Scheduled Benefit hospital rates. However, ordinarily such increases might be considered bursts of superimposed inflation.

When making recommendations as to the maximum premium increases, we believe it is appropriate for GPOC to consider the potential for the re-emergence of superimposed inflation on Future Care costs and higher levels of superimposed inflation on Common Law settlements.

### 10.2.2 Common Law

The base claim frequency of 1.68 is based on the recent experience. A pessimistic view would be an increase back to the level observed in 2008/09, of 2.05 claims per 1,000 vehicles. An optimistic view would be for a decrease equal in proportion to 1.38 claims per 1,000 vehicles.

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<sup>32</sup> Taylor Fry provided letters dated 21 June 2007, 1 March 2010 and 10 April 2012 containing analysis of historical rates of superimposed inflation for Common Law, Scheduled benefits and Future Care claim costs. Further details are contained in Section 9.7

The base average claim size is in line with the experience over recent years. An optimistic view would be for the average claim size to be lower by 10% due to cost savings. A pessimistic view would be for the average size to be higher by around 10%, through a combination of a higher proportion of non-nil claims and/or higher average non-nil settlements. Over the past three years, average damages for certain injuries have increased at a higher rate than inflation. This emerging trend is being monitored.

### 10.2.3 Future Care

Past numbers of Future Care claims (including allowance for IBNR claims) have varied between 6 and 15. The future number of claims expected in a particular year is considered likely to be between these numbers.

The average claim size for Future Care has been quite volatile. In addition, improving medical technology may lead to greater independence (which will tend to reduce care costs) or to requests for more expensive restorative treatments (which will tend to increase costs). Increases or decreases of 20% above or below those assumed are quite possible.

### 10.2.4 Scheduled Benefits

The base claim frequency of 5.88 is based on recent experience. A pessimistic view would be an increase back to the level observed in 2008/09, of 7.24 claims per 1,000 vehicles. An optimistic view would be for a decrease equal in proportion to 4.78 claims per 1,000 vehicles.

The base assumption for the average claim size is in line with the experience of recent years, plus an allowance for an increase in hospital bed day-rates from 30 June 2013. The optimistic view incorporates a reduction of 10% in the average claim size, whilst the pessimistic view has the average size deteriorating by 10%.

### 10.2.5 General administration expense allowance

The base case of 6.5% of claims cost is consistent with the expense assumptions incorporated in the MAIB Corporate Plan. An optimistic view of 6.0% is consistent with a 0.5% reduction. A pessimistic view incorporates an increase to 7.0%.

### 10.2.6 Real return

A real rate of return in the range of 2% per annum to 4% per annum is considered possible (especially in light of recent volatility in investment returns) and adoption of either end of the range would have a significant impact on the premium required. A real rate of return of 2% reflects the long run risk free rate of return above AWOTE adopted in the December 2012 valuation. The optimistic assumption of 4% reflects a return to conditions and expectations prior to the GFC. Negative investment returns during the GFC reduced the rolling five year average return above wage inflation to around 1%. Prior to the global financial crisis, the five year rolling average was greater than 4% per annum above wage inflation.

Table 1 shows that by reducing the real rate of return from 4% per annum (as used in the 2009 submission) to 3% in this submission, the average break-even premium reduces by \$15 to \$243 (exclusive of duty and GST). The implied profit margin for the period 1 December 2013 to 30 November 2014, before allowance for any premium increase is 15%, based on an assumed real rate of return of 4.0%, compared to 10% based on the adopted 3% real rate of return.

### 10.3 Future potential one-off changes to break-even premium

In addition to the “normal” uncertainty of break-even premium estimates, there are a number of other issues that may affect the ultimate break-even premium required. Due to the uncertainty of either a change being implemented or the associated magnitude of change, no allowance has been made for any of these “one-off” events in determining the premium assumptions. Nonetheless we believe that the Regulator should consider the potential effect of such changes when evaluating an appropriate **maximum** premium.

Potential changes include the proposed new framework for the regulation of the heavy vehicle. As discussed in section 2.2.9, the Heavy Vehicle National Law, introduces a single, national registration system for heavy vehicles. Options are currently being developed and costed, with state based registration likely to continue for at least the next 18-24 months. MA insurance has been listed as an issue that will need to be considered. Heavy vehicles account for more than 5% of the MAIB’s premium income, plus an additional 1% for buses, which will be included.

In the following section, the potential impact of the proposed National Injury Insurance Scheme is also considered.

### 10.4 National Injury Insurance Scheme (“NIIS”)

Due to the uncertainty surrounding the implementation of the National Injury Insurance Scheme, no allowance has been made for the scheme in determining the premium assumptions.

However, the MAIB’s actuary has estimated the additional cost of claims that would be covered by NIIS, allowing for known developments such as the FWA decision, based on the recommendations of the Heads of Treasuries Deputies, and not making allowance for coverage of Tasmanians injured interstate or coverage of unregistered vehicles on private property and unregistrable vehicles (motor cross bikes, quad bikes, trikes, off-road and racing vehicles).

The conclusions from that analysis are that:

- The current proposals will increase motor vehicle related costs to the MAIB in three areas:
  - additional Future Care claims from including previously uninsured claims;

- additional costs from currently insured claims that have medical and like costs capped at the statutory maximum, but which would exceed that cost under a NIIS scheme; and
  - additional uninsured catastrophic (but not Future Care) claims under the definition used in the PC report.
- The additional annual cost is estimated to be between \$18 and \$24 per vehicle, consisting of:
    - \$14.70 to \$19.60 from previously uninsured Future Care claim;
    - \$1.90 from additional costs from currently insured capped catastrophic claims; and
    - \$1.70 to \$2.20 from previously uninsured catastrophic claims.
  - Introduction of NIIS will increase complexity due to issues of allocation of costs between motor vehicle owners and other funding sources, such as council rates, and make it difficult to correct any mis-estimation;
  - All of these estimates are subject to considerable uncertainty. Areas that will require decisions are the potential dual coverage of interstate catastrophic injuries that would be eligible for Future Care benefits under the current MAIB scheme and the timing of potential coverage of off-road, unregistrable vehicles.

Until a decision regarding NIIS is reached, it is not possible to include full costing for an expanded scheme. However, the estimates above are indicative of the additional costs that may arise if the NDIS/NIIS follows the path indicated by recent developments, which have been proceeding at a rapid pace. These additional costs represent a material increase in MAIB's claims costs. To put this in perspective, Section 8.3 shows that the current break-even premium is estimated to be \$258, while the expected average premium to be collected during the year 1 December 2013 to 30 November 2014, prior to any increase at 1 December 2013, is \$287. The additional costs estimated above would largely consume the profit margin of \$29 in current premiums. .

# 11 PRICING STRUCTURE – PREMIUM RELATIVITIES

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## 11.1 Purpose of this section

To date the submission has addressed the overall level of premium required to be collected in order to meet costs. This section provides discussion on the current pricing structure, addressing such issues as cost allocation and cross subsidies.

## 11.2 Background and terminology

The MAIB pricing structure differentiates risks on the basis of vehicle type. Twenty-two vehicle classes are currently used in the pricing schedule, a copy of which is provided in Appendix A.

The main vehicle group is Class 1, Motor Cars. This class accounted for nearly two-thirds (including pensioners) of the total vehicle registrations at 30 June 2012.

The relationships between the premium rates for different vehicles are referred to as premium relativities. The premium relativity for a class of vehicle represents the ratio of the premium payable for that class to the premium payable for Class 1 (Motor Cars).

Claims cost relativities represent the ratio of the claims cost per vehicle for a class of vehicle to the claims cost per vehicle for Class 1 (Motor Cars). As such, they are an indicator of relative risk. Over the long term, it is desirable that the premium relativities reflect the claim cost relativities of each class, to minimise cross-subsidies.

### 11.2.1 Cost allocation

Motor accidents may involve more than one vehicle, with varying degrees of liability. The issue of allocation of costs between vehicles involved in an accident is a fundamental issue when determining reasonable premium relativities. Possible cost allocation methods include:

- costs allocated on the basis of the vehicle the injured claimant occupied (referred to by the Regulator as a “vulnerability” basis of allocation);
- costs allocated on the basis of fault ; or
- costs shared equally between the vehicles involved.

Alternatively, a mix of the allocation methods can be used.

Consistent with the previous submission, the most recent review of premium relativities has selected cost relativities that are based on an average of the following allocations:

- **Fault basis:** allocating claim costs according to the degree of fault attributed to the vehicle class (based on MAIB's assessment of liability attached to each incident); and
- **Fault and Future Care spread basis:** allocating non-Future Care costs based on fault, and spreading Future Care costs over all classes.

For comparative purposes only, relativities were also calculated using the vulnerability basis and a vulnerability basis with Future Care costs spread in proportion to non-Future Care costs.

The advantages and disadvantages of the various approaches are discussed in Appendix C.

The suggested changes to existing premium relativities take into account the cost allocation and perceptions of the underlying risk, including the experience in similar schemes with higher vehicle and claim volumes.

### 11.3 Pricing changes effective Dec-2009

As part of its 2009 pricing review, the GPOC Commission recommended that the MAIB change the following relativities for:

- Class 4, 5 and 20 motorcycles from 1.25 to 1.40;
- Class 6 Taxi and Chauffeured Hire Car from 2.95 to 3.54; and
- Class 18 Off-road and Recreational Vehicles from 0.5 to 1.0.

The Government accepted these recommendations. However, the MAIB only applied the recommended increases in 2009, resulting in the following changes:

- Class 4, 5 and 20 motorcycles increased from 1.25 to 1.28;
- Class 6 Taxi and Chauffeured Hire Car increased from 2.95 to 3.09; and
- Class 18 Off-road and Recreational Vehicles increased from 0.5 to 0.59.

Premiums across all classes have remained unchanged since December 2009.

The Commission also recommended:

- that the MAIB review the financial implications of changes to the pensioner discount eligibility criteria as data becomes available, and also assess whether the claims frequency has changed as a result of extending the discount to Health Care Card holders; and
- that the MAIB review the number of vehicle classes. In the first instance, the Commission recommended that priority be given to a review of medium to large motorcycles with a view to establishing whether fewer classes might be appropriate.

These recommendations have been considered as part of the latest relativity review and the MAIB's proposed pricing changes below.

## 11.4 Proposed pricing changes

### 11.4.1 Cost allocation approach adopted

The MAIB commissioned an actuarial review of the premium relativities taking into account the experience over the last 4 years. The investigation was completed in September 2012. In it, the actuaries used the same two bases for allocating claim costs as in the previous review:

1. **Fault basis:** allocating claim costs according to the degree of fault attributed to the vehicle class (based on MAIB's assessment of liability attached to each incident); and
2. **Fault and Future Care spread basis:** allocating non-Future Care costs based on fault, and spreading Future Care costs over all classes.

To provide continuity with previous reviews (for comparative purposes only), the actuaries also considered the following two bases:

3. **Vulnerability basis:** cost of claims for a vehicle class depends on the vehicle in which the injured person was travelling (for pedestrians and cyclists, costs are allocated to the vehicle they struck); and
4. **Vulnerability and Future Care spread basis:** adopting a vulnerability basis, but spreading the claim costs for Future Care claims over all vehicle classes (to ensure that the small number of these claims does not distort the relativities of any classes).

The recommendations from the review were driven by the existing relativities, the outcomes of cost allocation bases 1 and 2, 2009 GPOC recommendations and comments made by the GPOC Commissioner, and premium relativities in other states. The only classes for which a change is proposed are:

- Motorcycles (Classes 4, 5 and 20)
- Taxi or Chauffeured Hire Cars (Class 6)
- Medium Passenger Vehicles (Class 16)
- Small Motorcycle (Class 17)
- Off Road and Recreational Vehicle (Class 18)

No changes to vehicle classifications are proposed.

### 11.4.2 Proposed changes to relativities for motorcycles

It is proposed that the maximum allowable premium relativity for Class 4 (Medium Motorcycle), Class 5 (Large Motorcycle) and Class 20 (Medium Large Motorcycle) be increased to 1.50 and that the maximum allowable premium relativity for Class 17 (Small Motorcycle) be increased to 0.60.

The MAIB's previous submission suggested increasing the relativity for Motorcycles (Classes 4, 5 and 20) to 1.40. This increase represented only a modest increase, aimed at maintaining consistency between the three medium to large motorcycle classes, while giving weight to the range of possible relativities.

The Regulator in 2009 examined this suggestion in detail, taking into account a number of different bases for allocation of costs, premiums in other states and matters raised by the Tasmanian Motorcycle Council (TMC) in response to the Draft Report. In its submission the TMC suggested that the Draft Report recommendations ignored the recent initiatives that were directed at reducing the rate of motorcycle crashes. In its final report, the Commission considered that an increase in premium relativities from 1.25 to 1.40 was appropriate but should it be fully implemented, that it should be phased in over four years.

Table 11.1 summarises the recent experience for Classes 4, 5, 17 and 20.

**Table 11.1 Motorcycle relativity experience**

Class Description	Current Relativity	2009 Premiums Order Maximum Relativity <sup>1</sup>	Claim Experience Relativity <sup>2</sup>	Credibility Weighted Premium Relativity – current <sup>3</sup>	Credibility Weighted Premium Relativity – long term <sup>4</sup>	Proposed Relativity
4 Medium Motorcycle	1.28	1.40	3.61	2.68	3.30	<b>1.50</b>
5 Large Motorcycle	1.28	1.40	4.61	3.94	4.14	<b>1.50</b>
17 Small Motorcycle	0.50	0.50	1.06	0.69	0.79	<b>0.60</b>
20 Medium Large Motorcycle	1.28	1.40	4.14	3.12	3.11	<b>1.50</b>

Notes:

1. From Government Prices Oversight (MAIB Premiums) Order 2009
2. From selected claim experience relativity – average of min and max relativities calculated using a Fault basis and Fault and Future Care spread basis
3. Credibility weighted premium relativity calculated using the current relativity as the starting point. This approach gives more weight to the policy considerations that have resulted in the retention of the existing premium.
4. Credibility weighted premium relativity calculated using the credibility weighted premium relativity from the previous review as the starting point. The reason for examining this basis is that the experience prior to the last four years may not have been significant enough to warrant a relativity change at that time, but when combined with the experience over the last four years may warrant a change in relativity.

Table 11.1 shows that claim costs for motorcycles continue to be substantially higher than the premiums being collected.

In comparing premium relativities to other states consideration must be given to the nature of the scheme. A significant number of motorcycle accidents are single vehicle incidents and where the motorcyclist is at fault, the other vehicle(s) are less likely to be seriously injured. A Common Law scheme is therefore likely to make fewer payments than a no-fault scheme when a motorcycle is involved in an accident. Tasmanian relativities for

Motorcycles appear high when compared to Common Law scheme states, but look reasonable in comparison to Northern Territory and Victoria (the other no-fault/Common Law schemes). The Northern Territory relativity for Motorcycles over 260 cc is 1.47. In Victoria, the relativity is 0.9 for Motorcycles between 125 cc and 500 cc and 1.2 for Motorcycles over 500 cc (unchanged since the previous pricing review).

Based on the last four years of experience, the level of the cross-subsidy has increased, despite the initiatives that were directed at reducing the rate of motorcycle crashes. The deterioration of motorcycle experience has coincided with a period of rapid growth of motorcycle numbers. The growth in motorcycle numbers may have resulted in an increase in the proportion of inexperienced riders, and anecdotal evidence suggests that this may be particularly prevalent among middle aged men. This inexperience may have contributed to the deterioration in claim experience.

The recommended relativity of 1.50 for medium to large motorcycle classes is not significantly higher than the Commissioner's recommendation of 1.40 in 2009 and represents a modest increase compared to experience relativities over the past four years. In their September 2012 review, the actuaries recommended an increase to 1.60 and commented that if motorcycle experience continues to be significantly poorer than Class 1, a further increase in the relativity may be appropriate.

The MAIB has proposed a relativity lower than that indicated by the actuarial relativity review due to the commercial risk that if too high an increase is levied, an increasing number of motorcyclists who use their machines in the summer months may opt to register for six months only in each 12 month period.

The MAIB also considers it timely for a one-off increase in motorcycle relativities, rather than a gradual phasing in over the four year period.

The 2009 GPOC Commissioner also suggested that MAIB consider the costs and benefits of maintaining four separate classes of motorcycle categories, with a view to establishing whether fewer classes might be appropriate. Table 11.1 suggests that the relativity generally increases with the size of the motorcycle. However, further analysis shows that there is considerable variation between accident years in the order of relativities amongst Classes 4, 5 and 20. In fact, in 2009, Class 4 (Medium Motorcycles) had the highest relativity. Given this mixed experience, it does seem unlikely that these classes will be charged different premiums in the future. However, it is useful to monitor the three largest motorcycle classes separately, because:

1. The consistency of higher relativities for three separate classes of motorcycles adds to the case for higher relativities for motorcycles;
2. It will enable ongoing analysis of whether relativity does increase with the size of the motorcycle or whether this has just been due to random fluctuations.
3. The costs savings from combining the three largest motorcycle classes are likely to be minimal.

On that basis, the MAIB recommends maintenance of four separate classes of motorcycles, for monitoring and analysis purposes.

However, it is noted that if the three largest motorcycle classes were combined, the number of claims experienced by the combined class would lead to full credibility. This would also strengthen the case for increased relativities for motorcycles.

#### 11.4.3 Class 6: Taxi or Chauffeured Hire Cars

The previous relativity review noted the high relativity of Class 6 (Taxi or Chauffeured Hire Cars), and recommended a revision of the relativity to the credibility weighted relativity of 3.54. This was supported by the 2009 GPOC Commissioner.

The credibility weighted relativity for the past four years is 3.35 using the current premium as the starting point and 3.66 using the previous credibility weighted relativity as the starting point, both of which support the recommendation to increase the relativity of Class 6.

Premium relativities in other states range from 2.81 in the Northern Territory to about 15 in the ACT and NSW. In states with fault-based schemes the relativity tends to be higher, whilst in the no-fault schemes the relativities are lower (with TAC being 4.24 in the medium risk zone).

It is proposed that the relativity for Taxi or Chauffeured Hire Cars be increased to 3.50, noting that the suggested premium will continue to be at the lower end of the range of premiums charged in other Australian jurisdictions.

#### 11.4.4 Classes 9 and 10: Caravans and Heavy Trailers

In the 2009 pricing review, the Commissioner suggested that the impact of trailers may be understated because the claim is assigned to the vehicle towing. The MAIB has confirmed that the liability is usually only assigned to the trailer where the trailer was the only vehicle involved. However, the presence of a trailer is recorded in the incident report.

In order to investigate the extent of the understatement, all accidents involving a trailer over the past four years were extracted and reviewed by the MAIB's actuary.

In total, there were only 51 incidents involving trailers (including box trailers). These 51 incidents resulted in 66 claims and an incurred cost of \$4.8 million, compared to a combined total of 15 claims and \$0.4 million allocated to Class 9 and 10 on a fault basis. However, of the \$4.8 million, \$2.2 million was due to an incident involving a prime mover (Class 3) to which 100% of the liability was attributed. Excluding this incident, these incidents represent only 0.7% of MAIB's total incurred costs over the past 4 years. Premiums for Class 9 and 10 represent 1.0% of total premiums. Therefore, the degree of potential understatement is not considered to be significant.

#### 11.4.5 Class 16: Medium Passenger Vehicles

The average claims cost relativity over the past four years has only been 0.62 compared to a current relativity of 1.58. This represents a continuation of a trend of favourable experience, with even lower relativities reported in 2002, 2005 and 2008. The relativity has only exceeded 1.0 on a fault basis once in the past ten years.

The MAIB proposes only a modest decrease to 1.35 due to the low number of claims reported and the potential for considerable costs in the event of an accident involving a medium passenger vehicle. The impact on Class 16 of recent amendments to Acts relating to passenger transport is considered under section 11.6.

#### 11.4.6 Class 18: Off-road & Recreational Vehicles

In the 2009 MAIB submission, it was noted that the claims cost relativity for Class 18 (Off Road & Recreational vehicles) indicates higher experience than current premium relativities. However, it was also noted any increases must be weighed against the risk that they may lead to decreased registrations. Accordingly, a relativity at the lowest end of the range was considered appropriate and a relativity of 1.0 was recommended. The 2009 Commissioner also recommended a maximum premium based on a relativity of 1.0, but noted that for commercial reasons the MAIB may choose to charge a lower premium.

The credibility weighted relativity for the past four years is 2.05 using the current premium (or 2.25 using the previous weighted relativity). Analysis of historical relativities shows that the experience relativity has been consistently above 1.00 on both a fault and vulnerability basis.

Some increase in the relativity is still warranted in order to reduce the level of cross-subsidy. However, a substantial increase would undoubtedly result in a reduction in the number of registrations and thus premium income. Furthermore, introduction of the NIS will result in coverage of people catastrophically injured whilst riding these vehicles without any premium payment.

Therefore, for commercial reasons, an increase to only 0.75 is proposed.

#### 11.4.7 Classes 11, 12, 13, 14, 15, 19, 21 and 22.

Each of these classes has a small number of registrations, low claims history and relatively low premiums. Since 2009, there has not been a significant enough change in the credibility weighted relativities to warrant modifying the relativities of these classes. The 2009 Commissioner commented that there is a major problem in not having sufficient data to unambiguously determine and then forecast claims costs of a particular class based on historical data and trends. To partly address this issue, in the latest relativity review, the MAIB actuary included the alternative approach of calculating credibility weighted premiums that used the previous credibility weighted premium as the starting point (in effect including experience over eight years rather than the last four).

The 2009 Commissioner also recommended that the MAIB review all classes of vehicles to determine whether any reduction in the number of classes could be made to improve the reliability of the data, without increasing the potential for the emergence of inappropriate cross-subsidies within a class.

Whilst a reduction in the number of classes would improve the credibility factor, the combined classes could be difficult to define and even when combined, the number of claims would still not be that significant from a credibility perspective. In total, there were only 60 claims attributed to these eight classes.

## 11.5 Pensioner discounts

A discount of 20% is provided to private motor vehicles and light goods vehicles registered in the names of pensioners<sup>33</sup>.

In 2009, it was recommended that the pensioner discount be retained until some policy numbers and claims data had been obtained in relation to the experience of the pensioner group including health care card holders. The data prior to 2008/09 was also unreliable due to a systems correction in 2006/07 and a project to identify ineligible vehicle owners in 2007/08.

The number of vehicles to which a pensioner discount has been applied has increased from 76,000 in 2008/09 to 98,000 in 2011/12, reflecting the extension of the pensioner discount to health care card holders and possibly other factors, such as the poor economic climate and an ageing population. The growth in pensioner numbers represents a threat to profitability because it reduces the growth in the premium pool. Pensioner concessions are now applicable to over 20% of the Tasmanian vehicle fleet and that percentage is likely to continue to increase steadily in the medium term.

Table 11.2 below shows the average cost per vehicle for pensioners as a percentage of non-pensioners over the past 4 years, both including and excluding Future Care claims, on a fault basis.

**Table 11.2. Pensioner average cost per vehicle as a percentage of non-pensioner**

	2008/09	2009/10	2010/11	2011/12	Total
Pensioner as a % of Non-pensioner	74%	116%	178%	271%	<b>132%</b>
Pensioner as a % of Non-pensioner – <i>excluding Future Care</i>	171%	147%	208%	189%	<b>177%</b>

Table 11.2 shows that, on a fault basis, the experience amongst pensioners has been significantly poorer than non-pensioners over the past four years, particularly when Future Care claims are excluded. On average, pensioner experience has also been poorer than non-pensioners on a vulnerability basis. However, the difference is not as significant as on a fault basis.

Table 11.3 below shows that the poorer experience has been driven by higher claim frequency. Average claim costs have been very similar.

**Table 11.3. Claim frequency**

	2008/09	2009/10	2010/11	2011/12	Total
Non-pensioners	0.7%	0.6%	0.5%	0.4%	0.6%
Pensioners	1.1%	0.8%	1.1%	0.8%	0.9%
<b>Ratio</b>	<b>152%</b>	<b>146%</b>	<b>213%</b>	<b>181%</b>	<b>168%</b>

<sup>33</sup> The definition of pensioner is included in Appendix A.

The difference has been greater in the past two years than the previous two years. However, there is insufficient data to determine whether this represents an increasing trend or just volatility.

To determine whether the poorer experience is a result of the change in eligibility, pensioner claims were broken down by concession type in as great a detail as possible. On a vulnerability basis only 3% of claims could not be allocated to a concession type. However, on a fault basis, 20% of claims could not be allocated to a concession type. Conclusions are therefore limited. However, based on the data available, there does not appear to be any significant difference in claim frequency, on average, between Health Care Card holders and other pensioners.

A summary of claim frequencies by concession type, on a fault basis, is shown in Table 11.4. It is noted that 2008/09 represents an unusual year and should be ignored.

**Table 11.4. Claim frequency by concession type, fault basis**

Concession type	2008/09	2009/10	2010/11	2011/12	Total	Excluding 2008/09
CENTRELINK	1.03%	0.53%	0.80%	0.58%	0.73%	0.63%
DVA	0.74%	0.48%	0.71%	0.86%	0.70%	0.69%
HEALTH CARE CARD	0.00%	0.53%	1.15%	0.66%	0.67%	0.77%
TAS CONCESSION	1.09%	0.63%	1.07%	0.83%	0.90%	0.84%
<b>Total</b>	<b>1.07%</b>	<b>0.84%</b>	<b>1.06%</b>	<b>0.78%</b>	<b>0.93%</b>	<b>0.88%</b>
Non Pensioners	0.71%	0.58%	0.50%	0.43%	0.55%	0.71%

Note: 20% of claims attributed to pensioners over the past 4 years could not be allocated to a concession type. These claims are included in the "Total" claim frequency.

Table 11.4 shows that Health Care Card holders experienced significantly poorer experience in 2010/11, which has resulted in a higher overall average. However, in 2009/10, experience of Health Care Card holders was similar to non-pensioners and in 2011/12 experience of Health Care Card holders was above non-pensioners.

If all 20% of unknown claims happened to be Health Care card holders, this may change the conclusion in relation to the magnitude of the cross-subsidy to pensioners. However, this does not seem likely given the similar results on a vulnerability basis, of which only 3% of claims are unknown. In addition, Table 11.4 shows that all claim frequencies by concession type have exceeded the non-pensioner claim frequency in each accident year, even excluding the unknown 20% of claims, except in 2009/10. This supports the conclusion that the pensioner discount represents a cross subsidy regardless of the concession types.

In summary, analysis has shown significantly poorer experience amongst pensioners than non-pensioners, with no discernible difference by concession type based on the data provided. The pensioner discount therefore represents a cross subsidy. However, a reduction in this discount is not proposed.

Victoria continues to provide a discount of 50% to a broad group of pensioners in spite of similar analysis suggesting the discount represents a cross-subsidy.

### 11.5.1 Passenger Transport

The Regulator's Terms of Reference refer to the impact of recent amendments to the following acts on vehicle classification.

#### *Passenger Transport Services Act 2011 ("PTS Act") and Passenger Transport and Related Legislation (Consequential Amendments) Act 2011*

Under Section 11, the *Passenger Transport Services Act 2011* addresses the question "What is a passenger transport service operator?" Essentially, where a 'manned' vehicle has fewer than 10 seats, the operation is a passenger transport service only if passengers have to pay a fare and the service is available to the public.

As a reflection of the PTS Act, subject to Ministerial approval, the current premiums Order will be amended effective from 1 July 2013 as follows:

- community vehicles with less than 10 seats will take the Class 1 classification. Courtesy vehicles used by car dealers and the like will be treated similarly;
- 'manned' passenger vehicles with 10 seats or more, including community vehicles, will be subject to classification 16 (for vehicles with no more than 16 seats) or Class 7 if they have 17 seats or more. There is provision for vehicles used solely for private purposes to be excluded from the provisions of the PTS Act.

Small community vehicles (less than 10 seats) include ordinary sedans that are used to transport the aged or infirm to medical appointments. These vehicles pose a similar risk to private passenger vehicles. They have a wider use but, generally, the risk is contained due to the small number of passengers.

Community vehicles with 10 seats or more present a significantly higher risk than privately owned vehicles or small community vehicles. They are typically operated by nursing homes, schools or charities and in all likelihood, have a similar risk profile to small buses used by private operators on airport runs and the like.

It is expected that between 120 and 150 vehicles will be transferred from Class 16 to Class 1 at that time and a small number of vehicles currently in the class 1 classification will be transferred to class 16. This is not expected to have a material impact on claim relativities nor the proposed reduction in Class 16 premiums (Section 11.4.5).

#### *Taxi and Luxury Hire Car Industries Amendment Act 2011 ("Taxi Act")*

There is provision under the amended Taxi Act for general or specific restricted hire vehicle services (Section 84C). The impact of the extension of the Act to include restricted hire vehicle services on MAIB's vehicle classifications has been considered.

"Specific restricted hire vehicles services" allows the use of a vehicle for weddings, funerals, leaver's functions and the like. Such vehicles pose only the risk of a Class 1 vehicle. A "general restricted hire vehicle services" licence allows for wider use. However, an operator may only get a licence for a vintage type vehicle (over 30 years old) and it therefore suggested that Class 1 also applies. Inclusion of restricted hire vehicles under Class 16 is not proposed.

## 11.6 Comparison to other areas managed by state regulation

Vehicle classifications for Tasmanian motor registration and MAIB premium purposes are consistent, with a high correlation, and MAIB having more sub-divisions than motor registration (eg. four classes of motorcycles, whereas motor registration use only one).

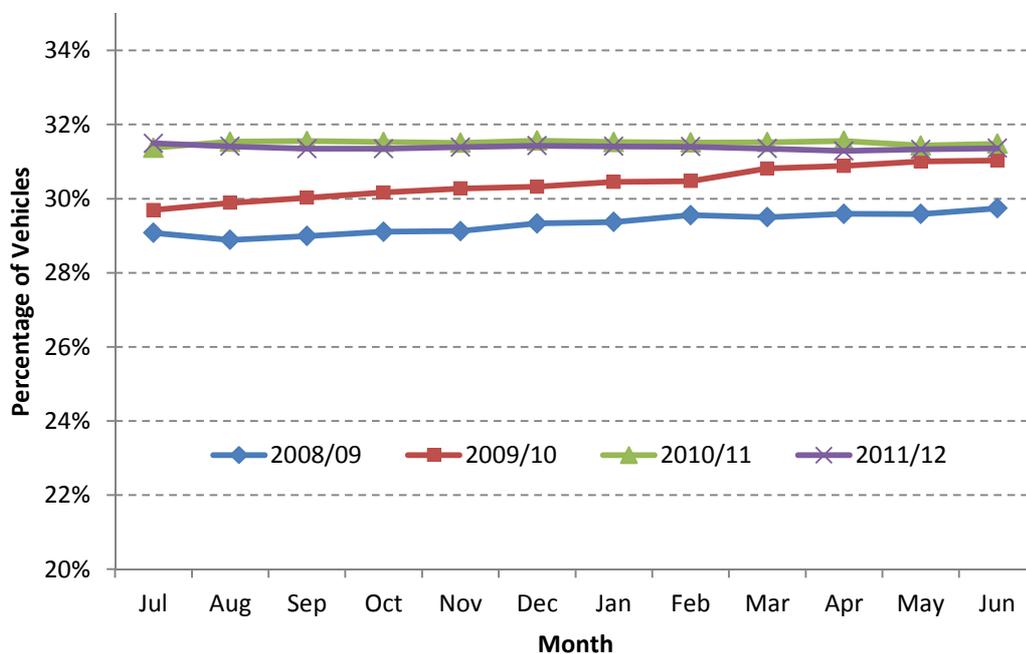
## 11.7 Periodic Registrations

Periodic registrations were introduced for all vehicles with effect from 1 December 2001. A surcharge is applied to the periodic registrations to cover forgone investment income and the additional collection costs. The impact of periodic registrations is therefore revenue neutral for the MAIB. The surcharge is 6% for quarterly registrations and 3% for half yearly registrations<sup>34</sup>.

Taylor Fry has calculated that the cost of foregone investment income and additional collection costs represent 2.6% of an average annual premium for half-yearly policies and 6.2% for quarterly policies. Quarterly policies are only available for heavy vehicles, so the additional collection costs are lower as a percentage. Accordingly, the 3% and 6% surcharges are considered reasonable.

Chart 11.1 shows the percentage of vehicles on register that renew periodically.

**Chart 11.1 Percentage of vehicles on register with periodic renewal**



<sup>34</sup> Only heavy vehicles can select quarterly registrations. This means that the majority of vehicles can only choose annual or half-yearly registrations.

## 12 FINANCIAL VIABILITY

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### 12.1 Purpose of this section

The financial viability of the MAIB depends on:

- charging sound premiums at least equal to the estimated cost of claims and expenses (that is, the break-even premium);
- sound claims management abilities, particularly in the area of Future Care, and accident prevention strategies to control claims costs;
- an effective investment strategy;
- an appropriate capital policy that recognises the variability of the business; and
- an appropriate dividend policy that recognises the variability of measured profit and the interaction with pricing and capital policies.

The premium and claims components are discussed in preceding sections of this report. The remaining financial viability elements are discussed in this section.

In addition, the GBE Act requires that the MAIB achieve a sustainable rate of return. This issue is dealt with in Section 13.

### 12.2 Outcomes of the 2001 solvency review

In 2001 the MAIB commissioned a “Solvency Review” which was conducted jointly by Taylor Fry and Macquarie Risk Advisory Services. The review was prompted by the growing significance of Future Care liabilities on the MAIB balance sheet, the volatility associated with these claims costs, and the implications for the long-term solvency position of the then-current dividend policy and conservative investment policy.

The three key outcomes of the review, implemented from 1 July 2001, were:

- targeting higher investment returns by adopting a benchmark asset allocation with a higher proportion of growth assets;
- using a Market Linked Fixed Gap Model for the valuation of claim payments expected to be made more than 10 years from the balance date, to reduce the volatility in outstanding claims liabilities<sup>35</sup>; and
- modifying the dividend policy to be based on average profits and losses over the most recent five years to produce more stable dividends reflecting longer term profitability.

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<sup>35</sup> The “fixed gap” used in the valuation of outstanding claims liabilities is discussed in Section 9.7.1.

## 12.3 Investment strategy

### 12.3.1 Current arrangements

Investment returns are a key component of both pricing and financial viability for the MAIB. This is a result of the long term nature of the MAIB's liabilities and the significant assets which are built up to fund those liabilities.

The investment policy is selected to achieve a satisfactory return for an acceptable level of risk. The chart below shows the actual investment holdings at 30 June 2012.

**Chart 12.1 MAIB asset allocation at 30 June 2012**

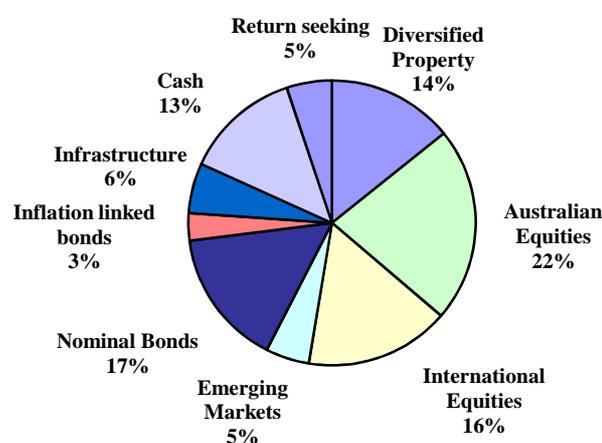


Table 12.1 shows the actual investment holdings in comparison to the benchmark asset allocation at 30 June 2012.

**Table 12.1 MAIB actual versus benchmark asset allocation at 30 June 2012**

	Benchmark	Actual
Diversified Property	14%	14%
Australian Equities	21%	22%
International Equities	17%	16%
Emerging Markets	5%	5%
Nominal Bonds	15%	16%
Inflation linked bonds	10%	3%
Infrastructure	8%	6%
Cash	5%	13%
Return seeking	5%	5%
<b>Total</b>	<b>100%</b>	<b>100%</b>

The change in the investment policy over time is demonstrated in the following table, which shows the proportion of investments in growth versus defensive assets at each 30 June in 1999, 2002, 2005, 2008 and 2012.

**Table 12.2 Change in MAIB investment profile 1999 to 2012**

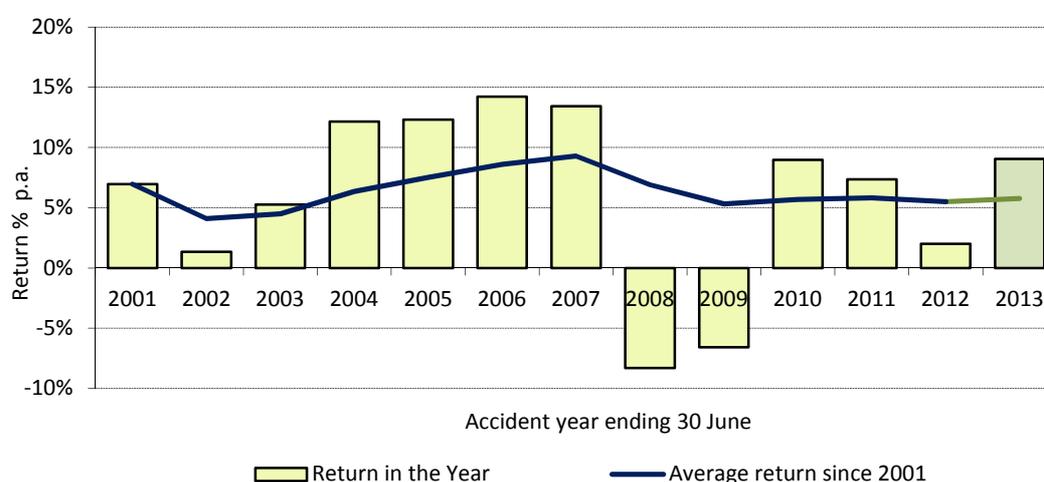
	Jun-99	Jun-02	Jun-05	Jun-08	Jun-12
Growth Assets	22%	47%	59%	56%	63%
Defensive Assets	78%	53%	41%	44%	37%
<b>Total Investments</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

The table clearly demonstrates the change in investment policy following the 2001 solvency review, with a significant shift to growth assets from defensive assets between 1999 and 2002. The increase in growth assets between 2002 and 2005 reflects the appreciation in property and share values during that period, and Macquarie Risk Advisory's advice that higher weightings to growth assets are reasonable in light of the MAIB's growing Future Care liabilities, as well as its stronger financial position.

### 12.3.2 Past investment returns

A twelve-year history of the investment returns achieved by the MAIB is shown in the chart below, along with the projected investment return for 2012/13.

**Chart 12.2 MAIB past investment returns**



Notes: The return is calculated as the investment income and unrealised gains and losses net of investment expenses, divided by the average assets over the year.

The chart shows that the average return since 2001 has been around 6% per annum, but with considerable volatility from year to year. The lowest return in the last thirteen years has been (8.8%) and the highest 13.9%. The increased use of growth assets in the MAIB investment portfolio from 2001 was expected to produce higher average returns, albeit with an increase in the volatility of those returns.

The higher weighting of growth assets allowed the MAIB to benefit from the strong economic growth in Australia and some overseas markets from 2003/04 to 2006/07. This followed several years of low returns due, in part, to losses in equity markets worldwide<sup>36</sup>. However, this higher weighting of growth assets also resulted in larger negative returns as a result of the global financial crisis during 2007/08 and 2008/09 and a lower investment return last year as a result of continuing economic turmoil.

The rate of return assumed for pricing purposes is discussed in Section 9.7.1.

## 12.4 Dividend policy – return to shareholders

In accordance with the GBE Act, the MAIB is required to remit dividends to the State Government of Tasmania. The dividend policy applying to the MAIB is as follows:

- 50% of average after-tax profits and losses over the current and four preceding years is determined as a “profit” dividend; plus
- such special dividends as deemed appropriate.

Should the MAIB be required to pay a dividend in excess of 50% of after tax profit and losses, solvency could fall below the target solvency range. Actuarial advice concluded that dividends based on 70% of after tax profits in the current and previous four years are unsustainable and would be detrimental to the solvency ratio. The Review of Capital Requirements Report completed by the MAIB’s actuary was made available to the Department of Treasury and Finance in February 2011.

## 12.5 Capital policy and scheme solvency

### 12.5.1 Target capital and solvency

It is essential that MAIB holds an appropriate level of capital for reasons of good governance and sound financial management. The Board has established a target capital which seeks to achieve a balance between the desire to hold capital to ensure that “normal” fluctuations in experience can be funded without volatility in premiums, and the responsibility to make efficient use of capital.

The Board has resolved that, for the purposes of capital monitoring, the net assets reported in the annual accounts will be reduced by the dividends that have been calculated from previous years’ profits, but which have not yet been paid.

An evaluation of the Board’s solvency position was undertaken by its actuary in April 2007, following the move to a higher proportion of growth assets. The Board adopted the actuary’s recommendation that the target solvency be amended to a range of 20% - 25%.

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<sup>36</sup> Factors influencing the equity markets’ performance in these years included major corporate collapses, the events of September 11 2001, and accounting scandals in the United States.

The Scheme's solvency reduced from 29.5% as at 30 June 2007 to only 15.5% as at 30 June 2009, as a result of the global financial crisis. However, the scheme's solvency returned to the target range within a year, 24.2% as at 30 June 2010 and 25.7% as at 30 June 2011. Due to the current economic turmoil, the scheme's solvency decreased to 18.6% at 30 June 2012. However, current forecasts indicate that the solvency level will return to within the target range by 30 June 2013.

In the previous pricing review, the overall effect of the GFC was estimated to be a reduction in the level of solvency in the order of 20-25%. The global financial crisis presented a real life "stress test" of the scheme's solvency margin. The fact that the observed reduction in solvency was of the same order as to the target solvency range indicated that the Board's target solvency range is of the right magnitude. The solvency margin is required to meet a wide range of unexpected fluctuations in experience, and it is not possible to foresee all possibilities or to be more precise about how large the margin should be. Suffice to say that in the recent economic environment, the solvency margin has proved to be an adequate buffer against an extreme event.

### Risk margin on claim liabilities

The total claims provision shown in an insurer's balance sheet comprises:

- a central estimate of the outstanding claims liabilities which is designed to have no bias towards over- or under-estimation; plus
- a risk margin, generally expressed as a percentage of the central estimate, which increases the likelihood that the provision will prove to be adequate.

APRA effectively requires private sector insurers to hold a risk margin which (as a minimum) is set to a level such that the total provision for outstanding claims has a 75% probability of adequacy.

The MAIB has for many years included a prudential margin of 20% in the outstanding claims provision. Taylor Fry has advised that this is expected to provide for a probability of sufficiency of not less than 75%, which is the level required for private sector insurers regulated by APRA.

### Premium Liabilities

Premium liabilities are those liabilities which are attributable to claims that will occur after the scheme's balance date, for which premium has already been received. The APRA requirements for premium liabilities comprise:

- a central estimate of outstanding premium liabilities which is designed to have no bias towards under- or over-estimation (50% probability of adequacy); plus
- a risk margin to increase the probability of adequacy.

Essentially the central estimate is to be determined in a similar manner to the outstanding claims liability and the prudential margin is to be set at a level to achieve a 75% probability of sufficiency.

In addition, a requirement of Accounting Standard AASB1023 is to undertake a Liability Adequacy Test (LAT). This test compares the following:

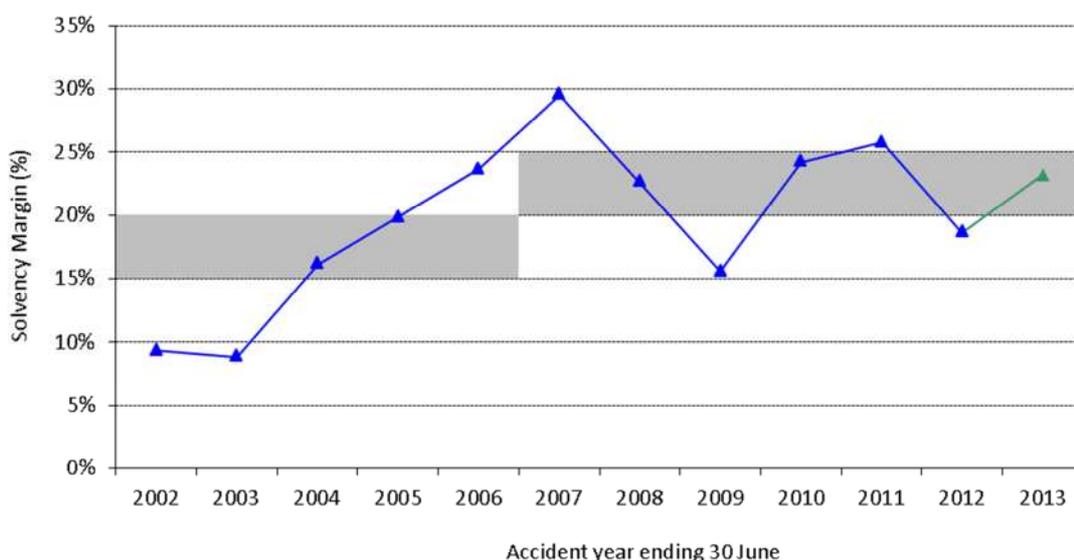
- the discounted value of the expected future claims costs, plus an allowance for expenses and a prudential margin, that will be incurred after the balance date arising from policies issued prior to the balance date; and
- the Unearned Premium Reserve (UPR), net of Deferred Acquisition Costs (DAC).

If the discounted claims cost (plus expenses and margins) exceeds the UPR net of DAC, a deficiency must be recognised. The Liability Adequacy Test at 30 June 2012 did not reveal a “deficiency”, after the writing back of the DAC. The unexpired risk liability identified at 30 June 2009 was entirely removed as at 30 June 2010.

## 12.6 Trends in Scheme solvency

A history of the MAIB’s solvency margin is provided in the chart below, along with the projected solvency margin as at 30 June 2013. As noted previously, the Board has resolved that, for the purposes of calculating the solvency margin, the net assets reported in the annual accounts will be reduced by the dividends that have been calculated from previous years’ profits, but which have not yet been paid. The solvency margin shown in Chart 12.3 uses this measure.

**Chart 12.3 Trends in scheme solvency**



The chart shows that the solvency position improved markedly in 2004. This was a consequence primarily of strong investment performance, but was also due to favourable claims experience.

From a high of 29.5% at 30 June 2007, the measured<sup>37</sup> scheme solvency reduced to 22.6% at 30 June 2008 and 15.5% at 30 June 2009 due to the global financial crisis: negative investment returns, as well as an increase in projected claims expense as a result of a very significant downward movement in risk free rates (offset in part by continued favourable claims experience).

The scheme's solvency recovered faster than projected to 24.2% at 30 June 2010 as a result of favourable investment returns and claims experience. However, after exceeding the target range at 30 June 2011, the solvency margin was slightly below target as at 30 June 2012 as a result of reduced investment returns and low risk-free discount rates, due to continued economic turmoil.

### 12.6.1 Solvency levels of other centrally managed MA schemes

The table below compares the MAIB's solvency level over the past four years with the solvency levels of two other centrally managed schemes: Victoria and WA. The solvency of all schemes deteriorated between 2006/07 and 2008/09 as a result of the global financial crisis and again during 2011/12 due to poor investment returns.

**Table 12.3 Solvency levels of centrally managed MA schemes**

State	30-Jun-07	30-Jun-08	30-Jun-09	30-Jun-10	30-Jun-11	30-Jun-12
<b>TAS<sup>(2)</sup></b>	29.5%	22.6%	15.5%	24.2%	25.7%	18.6%
<b>VIC</b>	20.8%	9.2%	-8.4%	-8.2%	-5.6%	-16.5%
<b>WA</b>	53.1%	50.3%	37.0%	44.4%	37.1%	27.2%

Notes:

1. Net Assets divided by Outstanding Claims Provision, taken from annual reports at 30 June 2007 to 2012. It should also be noted that within the provision for outstanding claims, the prudential margin held will vary between schemes.
2. In calculating MAIB's solvency margin, net assets reported in the annual accounts are reduced by the dividends that have been calculated from previous years' profits, but which have not yet been paid.

<sup>37</sup> The measured solvency depends on the valuation of the outstanding claims liabilities, which is an estimate and subject to considerable uncertainty.

## 13 PROFITABILITY AND FORECAST FINANCIAL POSITION

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### 13.1 Purpose of this section

The GBE Act requires that the MAIB has as a principal objective the achievement of a sustainable commercial rate of return. Section 6.3 of this submission describes the sources of profit for a general insurer and explains the need for a profit margin in the premium to reward shareholders for the risk associated with providing insurance.

This Section

- introduces two measures of profitability;
- establishes a target profit margin for the MAIB;
- draws together all relevant information from the preceding sections to present a projected forecast of MAIB expected revenue and outgo, financial position and profitability; and
- considers the required level of premium increase in light of the financial forecasts and the target rate of return for Treasury.

### 13.2 Measures of profitability

#### 13.2.1 Profit margin

One measure of profitability is the profit margin, calculated as the profit in the premium divided by the written premium.

The profit margin is used primarily for pricing purposes. It is the allowance for the profit margin that converts the estimated break-even premium to the average premium to be charged.

#### 13.2.2 Return on capital (“ROC”)

The after-tax ROC represents the effective rate of return achieved on the capital underlying the business. It is a preferred measure for assessment of Scheme profitability, as it takes into account not only the amount of profit but also the level of investment (by its shareholder, the government) supporting the business and the investment earnings on that capital.

The ROC measure can be used in a number of ways:

- to report the profit emerging in a financial year, either for the whole Scheme, or for some part thereof (the latter requiring that capital be allocated to different segments of the Scheme); and

- to assess the underlying profitability of a year's business (or some part thereof). This is part of the pricing function.

The pricing function of the ROC is linked to the profit margin: the higher the level of capital required, the greater the profit margin needed in premiums to support a particular target ROC.

### 13.3 Target profit margin

The MAIB has established a target profit margin taking into account a range of factors, including:

- the requirements of the GBE Act;
- the previous assessment by the GPOC;
- the revenue shortfall between the theoretical premium collection and the actual amounts collected;
- target profit margins by other MA insurance underwriters; and
- actuarial advice regarding a reasonable margin taking into account the volatility inherent in the business, and the returns required by shareholders.

#### 13.3.1 Requirements of GBE Act

The GBE Act requires the MAIB to have as a principal objective the achievement of a sustainable commercial rate of return that maximises value to the State. From discussions with Treasury, the MAIB understands that the basis of this objective is as follows:

- Like the private sector, MAIB should maximise value for its owner (the Government); and
- The requirements for the MAIB to strive to achieve the commercial rate of return and for the return to be sustainable recognise the long-term nature of the MAIB's business.

The target profit margin required to produce a reasonable after-tax ROC can be determined by modelling a single year's business, combining assumptions regarding the following:

- the break-even premium;
- the target after-tax ROC;
- the target level of capital to support the business;
- *A target level of capital of 22.5% has been assumed, based on the mid-point of the Board's target range of 20% to 25%*
- the claim payment pattern, and future outstanding claims liabilities.

- These have been calculated on assumptions which are consistent with the break-even premium calculations. In addition, a 20% prudential margin is assumed to be added for reserving purposes.

### 13.3.2 Profit margin from 2009 GPOC review

Chapter 4 of the 2009 report of the GPOC review discusses the basis for GPOC's evaluation of an appropriate profit margin for the MAIB premium. Section 4.2.2.1 of the 2009 GPOC review stated: "... in the longer-term, the Commission considers that it may be more appropriate to apply a minimum target profit margin of 10.0 per cent, the same as the target profit margin for the TAC." This represented an increase from a previous target of 8.0 per cent. A higher profit margin was considered appropriate and prudent in the current investment climate to account for the potentially higher levels of risk associated with the assumptions used in calculating the break-even premium.

### 13.3.3 Revenue shortfall

Historically there has been a difference between the premium collected and the "theoretical" collection if the schedule of premium rates is applied to the number of registered vehicles. This revenue shortfall can be attributed to a number of factors, including the following:

- a shift in the mix of vehicles (from one Class to another), or from non-pensioner status to pensioner status;
- non-renewal of periodic registrations (the theoretical premium calculation assumes all registered vehicles pay a premium for twelve months, whether in one payment or in instalments). There may also be non-payment of a periodic registration, but subsequent payment of the next periodic amount;
- "gaps" between periods of registration. An example is the sale of a self-drive hire car – the hire car company may cancel the registration when it divests itself of the vehicle and it may remain unregistered until purchased by a private owner through the used car market. A similar situation may arise on decommissioning of registrations for Government vehicles and subsequent sale into the private market; and
- part-year registrations (for seasonal agricultural equipment, for example).

Chapter 4 of the 2009 GPOC report concluded that a 1% allowance for revenue shortfall was still reasonable as a basis for establishing a maximum premium increase.

### 13.3.4 Target profit margin in other MA insurance schemes

The evaluation of a target commercial rate of return should consider the profit margin incorporated in the premium in other schemes. Two schemes for which information on profit margins is in the public domain are NSW (a privately underwritten, common law scheme) and Victoria (underwritten in the public sector, with both no-fault and common law benefits).

## Victoria

The scheme in Victoria is underwritten by the Transport Accident Commission (“TAC”). The proposed TAC premium was reviewed by the Essential Services Commission (“ESC”)<sup>38</sup> until 2005/06, at which time it concluded that the proposed premium was expected to be adequate<sup>39</sup>. Section 3.5 of the 2005/06 ESC report noted that the profit margin in the proposed average premium is 10.2%, which slightly exceeds the TAC target profit margin of 10%.

The ESC may be requested by the Minister to review premiums at any time, but no subsequent requests have been made since 2005/06.

## New South Wales

MA insurance in NSW is underwritten by private sector insurers, and overseen by the Motor Accidents Authority (“MAA”). The private sector insurers are required to file proposed rates, and the basis for those rates, with the MAA.

The following table is reproduced from the MAA annual report for 2011/12<sup>40</sup> and shows the profit margins in the filed rates for the periods 2007/08 to 2011/12.

**Table 13.1 Profit margins in insurer filings of NSW premiums**

Filing Period	Range (%)	Weighted Average (%)
2007/08	5.0 - 9.3	7.7
2008/09	4.7 - 9.3	8.1
2009/10	5.0 - 9.3	8.6
2010/11	6.8 - 9.0	8.6
2011/12	1.9 – 9.3	8.1

### 13.3.5 Actuarial advice on appropriate profit margin

Taylor Fry have advised that it would be reasonable for the MAIB to have a target profit margin of 10% of premiums. This advice is based on comparisons with other schemes, taking account of differences between the assumptions used by the MAIB and other schemes in deriving break-even premiums.

### 13.3.6 MAIB target profit margin

The MAIB has selected a target profit margin of 10% for premium purposes.

<sup>38</sup> The ESC reports to the Minister for WorkCover (whose ministry includes the Transport Accident Commission ) and provides an independent assessment on the adequacy of the proposed premium.

<sup>39</sup> Report of the Essential Services Commission, *Review of 2005-06 Transport Accident Charges; Report to the Minister for WorkCover*, April 2005.

<sup>40</sup> 2011/12 Annual Report for the Motor Accidents Authority of NSW, page 73

## 13.4 Projected profitability under different premium scenarios

This section considers the long-term profit and rate of return on capital expected from a single year's premium in isolation. Two scenarios are shown:

- Scenario 1: current premiums increase in line with Australian AWOTE for the period 1 December 2013 to 30 November 2017; and
- Scenario 2: current premiums increase in line with CPI for the period 1 December 2013 to 30 November 2015. At that stage, the profit margin is projected to have reached its target level of 10% and so premium increases in line with Australian AWOTE have been included thereafter.

Claims costs are assumed to increase in future in line with increases in Tasmanian Average Weekly Ordinary Times Earnings ("AWOTE") plus superimposed inflation. However, future premium increases have been based upon forecasts for Australian AWOTE, rather than Tasmanian AWOTE, as a reflection of the TER's practice of using Australian AWOTE for maximum allowable increases. The MAIB Premiums Order defines AWOTE as 'the dollar figure for full-time adult ordinary time earnings for persons set out in that part of the Average Weekly Earnings under the heading 'Average Weekly Earnings', Australia: Original.' Historically, Australian AWOTE has exceeded Tasmanian AWOTE by between 0.25 to 0.5% per annum.

The table below summarises the expected after-tax profit margin and after-tax ROC expected from a single year's premium in isolation under each of these scenarios.

**Table 13.2 Single year premium net profitability and return on capital under different premium scenarios**

	Premium Increase			
	Scenario 1 <sup>1</sup>		Scenario 2 <sup>2</sup>	
After-tax profit in premium	Profit <sup>3</sup>	Profit <sup>4</sup>	Profit <sup>3</sup>	Profit <sup>4</sup>
Year 1 (Dec-13 to Nov-14)	13.5%	-0.7%	12.3%	-2.2%
Year 2 (Dec-14 to Nov-15)	13.5%	-0.5%	10.9%	-3.4%
Year 3 (Dec-15 to Nov-16)	13.4%	-0.2%	10.8%	-4.6%
Year 4 (Dec-16 to Nov-17)	13.5%	0.4%	10.9%	-5.6%
After-tax return on target capital <sup>5</sup>	ROC <sup>3</sup>		ROC <sup>3</sup>	
Year 1 (Dec-13 to Nov-14)	7.7%		7.4%	
Year 2 (Dec-14 to Nov-15)	7.7%		7.1%	
Year 3 (Dec-15 to Nov-16)	7.6%		7.1%	
Year 4 (Dec-16 to Nov-17)	7.7%		7.1%	

Notes:

1. AWOTE increases from 1 December 2013.
2. CPI increases from 1 December 2013 to 30 November 2015, AWOTE thereafter.
3. Calculated using a 3.0% per annum real rate of return.
4. Calculated using current risk free rates and current inflation rates.
5. Target capital is assumed to be 22.5% of the outstanding claims provision; the mid-point of the target range (20% to 25%).

Under Scenario 1, the expected long-term profit inherent in each year's premium is around 13.5% on the current pricing basis (3.0% per annum real rate of return). This translates to an after-tax return on target capital of about 7.7% per annum. However, as a result of the

unusual economic climate, the implied profit margin based on current risk-free rates is around 0%.

Under Scenario 2, the expected profit inherent in each year's premium decreases from around 12.3% to 10.8% on the current pricing basis and is less than 0% based on current risk free rates and inflation forecasts. Under both measures, profitability is projected to exceed the target level unless claims costs or investment returns prove to be less favourable than forecast. The after-tax return on capital implied by this scenario is expected to decrease from 7.4% to 7.1%.

## 13.5 Projected financial position

This section provides a summary of projected financial statements for the MAIB under the two scenarios described previously. These projections combine the future business projections described in Section 13.3.2 with the existing financial position of the MAIB and the run-off of the existing claims liabilities. As such they are an amalgamation of the profitability of past, current, and projected future premiums and investment conditions.

Detailed financial statement projections are included in Appendix D. Key aspects of the projections are discussed below.

### 13.5.1 Forecast profitability and return on capital

The table below shows the after tax return on actual and target capital from the Scenario 1 and Scenario 2 forecast financial statements in Appendix D. These returns include the projected financial results for the whole scheme, whereas the returns in Table 13.2 relate to a single year's business only. The return on Target Capital is shown to enable comparison between years, after removing the effects of capital being above or below target.

**Table 13.3 Forecast after-tax profit as a % of actual and target capital**

Year end 30 June	Scenario 1 return on		Scenario 2 return on	
	Actual Capital	Target Capital	Actual Capital	Target Capital
	% p.a.	% p.a.	% p.a.	% p.a.
<b>2008</b>	(7.4%)	(9.9%)		
<b>2009</b>	(5.7%)	(7.3%)		
<b>2010</b>	30.2%	42.6%		
<b>2011</b>	18.5%	27.3%		
<b>2012</b>	(10.6%)	(15.4%)		
<b>2013</b>	26.3%	31.5%	26.3%	31.5%
<b>2014</b>	10.7%	13.3%	10.6%	13.1%
<b>2015</b>	10.7%	13.2%	10.2%	12.4%
<b>2016</b>	11.3%	13.9%	10.4%	12.7%
<b>2017</b>	11.0%	13.5%	10.2%	12.2%

There are several key observations from the results shown in the above table:

- The return on both actual and target capital was negative during 2008/09 and 2009/10. This is primarily due to negative investment returns, offset in part by favourable claims experience. The return was again negative during 2011/12 as a result of continued economic turmoil;
- The projected return on capital is projected to be high in 2012/13, due to a combination of a forecast relatively low claims cost (based on experience to date) and relatively high investment return. It is projected to return to a more reasonable level from 2013/14, when claims costs and investment returns are assumed to return to the long-term projected level. Ultimately, variation between the expected and actual investment return will be a key factor affecting whether profitability is above or below the projected level. The volatility of past investment returns may be expected to continue in future, with resultant fluctuations in future year's returns on capital;
- The historical returns on target capital have been lesser magnitude (both positive and negative) than the returns on actual capital. This reflects the fact that the actual capital (including deferred dividends) has been higher than target;
- The difference between the return on actual capital and target capital is projected to narrow in coming years. This is because the actual capital is expected to return to the target band during this period;
- The projected after-tax returns are somewhat higher than those underlying a single year's premium, as shown in Table 13.2. This is because each accounting year is affected by both the single new year's returns and the runoff of all previous accident years; and
- The difference in projected returns on capital between Scenarios 1 and 2 reflects the difference in profits caused by premium increases in line with AWOTE (assumed to be 4.0% per annum) for the period 1 December 2013 to 30 November 2015 instead of increases in line with CPI (assumed to be 2.5% per annum).

As discussed previously, the return on capital quoted above for MAIB is on the basis of forecast financial statements. Whilst useful for comparative purposes, this return will be heavily influenced by past premiums and their level of profit, and actual investment returns. Short term premium increases have a limited impact on these returns.

The more appropriate approach is to consider the expected rate of return on capital expected to arise from a single year's premium (the analysis presented in Section 13.4 above.)

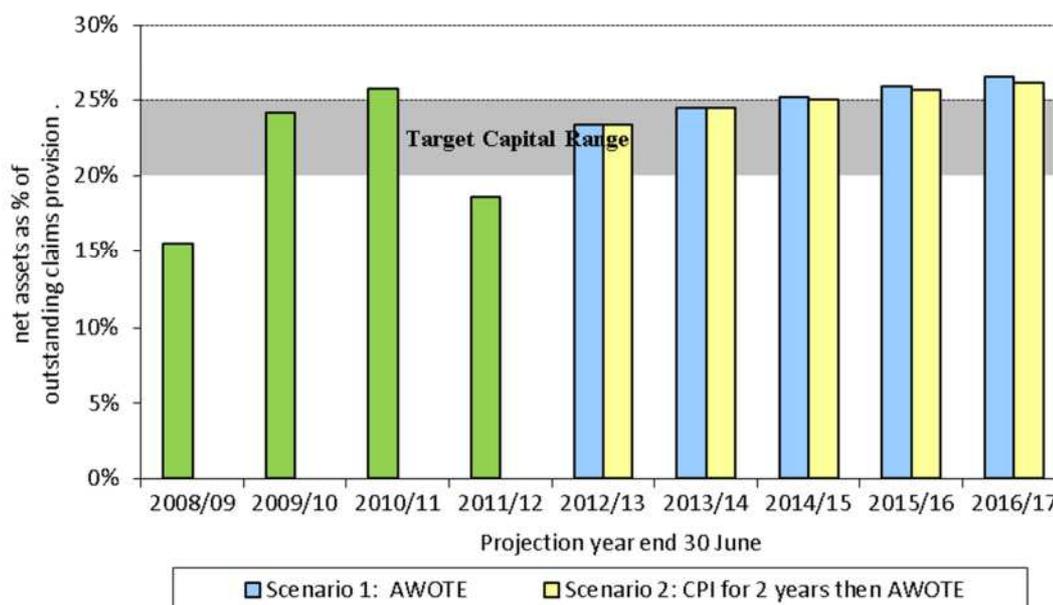
### 13.5.2 Forecast solvency

Section 12.6 highlights the deterioration in the MAIB solvency position as a result of the global financial crisis (offset in part by continued favourable claims experience), following a period of marked improvement as a consequence primarily of strong investment performance. The Scheme's solvency reduced from 29.5% as at 30 June 2007 to only 15.5% as at 30 June 2009, as a result of the global financial crisis. However, the scheme's solvency

returned to the target range within a year, 24.2% as at 30 June 2010 and 25.7% as at 30 June 2011. Due to the current economic turmoil, the scheme’s solvency decreased to 18.6% at 30 June 2012. However, current forecasts indicate that the solvency level will return to within the target range by 30 June 2013.

The chart below shows the projected future solvency position under each of the two premium scenarios described earlier.

**Chart 13.1 Forecast solvency**



Under both scenarios:

- The premium increases are lower than the assumed rate of increase in claims costs, as both Common Law and Scheduled Benefits show evidence of superimposed inflation; and
- There is a “valuation strain” at the time that the premium is written, when the outstanding claims provision for the year’s claims is established. Whilst the provision is based on the same expected claims cash flow, the discount rate is lower than the pricing discount rate<sup>41</sup>, and the provision includes a 20% prudential margin to increase the likelihood of adequacy. As the scheme is projected to grow due to inflation and a growing stock of Future Care claims, this strain needs to be financed from capital.

As a result, the solvency position might be expected to deteriorate over the long term. However, it can be seen that under both premium scenarios, solvency is projected to gradually increase. The key reason for this is that long term investment returns are projected to be higher than the assumed rate of increase in claims costs.

<sup>41</sup> The reasons for a different valuation discount rate are discussed in Section 9.7.1. All things being equal a lower discount rate increases the estimate of the outstanding claims provision (since investment earnings are assumed to provide a smaller contribution to the funds required to make claims payments).

## 13.6 Required premium increases

Continued financial viability of the MAIB requires:

- premiums set to break-even plus an appropriate profit loading (as discussed above);
- future premium increases to match the expected increase in claim costs (inflation plus superimposed inflation, to the extent that it cannot be managed within the scheme); and
- maintenance of a sufficient solvency margin.

### 13.6.1 Solvency Position

An evaluation of the Board's solvency position was undertaken by its actuary in April 2007, following the move to a higher proportion of growth assets. The Board adopted the actuary's recommendation that the target solvency be amended to a range of 20% - 25%. In March 2012, the MAIB's actuary reviewed MAIB's capital policy in light of the proposed changes to APRA's Minimum Capital Requirements. The actuary recommended that the current targets be maintained, because it was not possible to anticipate where the average level of MCR coverage among private insurers would fall after 1 January 2013. However, it was also recommended that, in view of the likelihood of some increase in solvency target, the MAIB aim for the upper end of the current solvency targets.

At the time of the 2009 GPOC review, the scheme's solvency was below the target range established by the Board due to the GFC. As a result of continued economic turmoil, the scheme's solvency was again just below the target range as at 30 June 2012. In the 2009 MAIB submission, it was estimated that the effect of the global financial crisis was in the order of a 20-25% reduction in the MAIB's solvency position and that the solvency margin had proved to be an adequate buffer against what was an extreme event.

The movements in the scheme's solvency can mostly be attributed to investment returns. The MAIB's investment policy enabled the MAIB to benefit from strong market growth until 2006/07, but has also resulted in larger negative returns as a result of the GFC and lower returns in 2011/12.

Solvency improvements can also be attributed to positive claim experience. This positive experience has not only helped increase the MAIB's solvency position, but has also had a marked effect on the level of premiums required. One of the main factors that has influenced necessary premiums is the reduction in claim frequency.

The MAIB's response to this favourable experience has been to leave premiums unchanged since December 2009. Future premiums should be set with regard to both the recent favourable experience and the projections assuming claim costs increase from the current low base. It has been observed in this submission that both reduced claim frequencies and lower Common Law claim costs will be hard to maintain in future, as incremental gains become harder and harder to achieve and that there are a number of potential threats to the MAIB's profitability.

### 13.6.2 Projection scenarios

Two scenarios have been considered for premiums from 1 December 2013, the effects of which are illustrated below:

#### Scenario 1

Premium increases in line with Australian AWOTE from 1 December 2013 onwards. Increases under this scenario are expected to:

- maintain an expected long term profit margin of 13.5% of premiums, based on a 3% annual real rate of return; and
- achieve a reasonable net return on target capital of around 7.7% over the next 4 years.

The financial forecasts are based on models of claim costs that represent average experience in the recent past. They do not specifically allow for the considerable variability which may be expected in the resultant annual accounting profit, investment returns, claims costs and solvency.

#### Scenario 2

Increases in line with CPI over the next two years (at 1 December 2013 and 1 December 2014), but AWOTE thereafter. Increases under this scenario are expected to:

- reduce the expected long term profit in premiums, based on a 3% annual real rate of return, to 10.8%; and
- produce a slightly lower net return on capital (between 7.1% and 7.4% per annum) over the next 4 years.

### 13.6.3 Preferred Scenario

Scenario 2 reduces profit margins closer to target. However, Scenario 1 is considered a more appropriate option for maximum allowable increases, in light of the potential threats to MAIB's projected financial position, including:

- At the time of the 2009 pricing review, there were some signs that claim frequency improvements were slowing – and in fact, 2008/09 claim numbers turned out to be the highest in several years. The last few quarters of 2012 have shown that claim numbers may have stabilised. These two periods indicate that the claim frequency improvements that have reduced the need for premium increases in recent years are uncertain. If the frequency improvements do not continue, the MAIB is likely to need to increase premiums at some stage during the next four years.
- The introduction of NIIS is expected to increase MAIB claim costs. While the exact details are not yet known, recent estimates of the potential increases arising from recommendations by COAG advisory groups suggest that they would largely consume the profit margin in current premiums, reducing the MAIB profit margin to well below its target level. Government announcements indicate that the NIIS is

planned to be introduced during the next four years and recent developments have been proceeding at a rapid pace. The break-even premium includes additional allowances for proposed increases in hospital rates, ambulance rates and Future Care care cost rates. The uncertainty surrounding these increases indicates a need for flexibility in premium increases.

Scenario 1 provides the flexibility to increase premiums if any of the threats identified above materialise over the next four years, noting that MAIB would not apply the full AWOTE increase each December unless it is warranted at the time.

### Recommendation

**It is recommended that Scenario 1 be adopted, namely that the maximum increases be based on current premiums increasing in line with Australian AWOTE for the period 1 December 2013 to 30 November 2017.**

## APPENDIX A PRICING SCHEDULE AT 1 DECEMBER 2012

Class	Description of Vehicle	Annual Premiums (inc of GST, but exd \$20 Duty)
1	<b>Motor Car-</b> A motor vehicle constructed principally for the carriage of persons, including a campervan, and not included in any other class.....	344.00
	PENSIONERS.....	275.00
2	<b>Light Goods Vehicle -</b> A motor vehicle constructed principally for the carriage of goods, and with a gross vehicle mass not exceeding 4.5 tonnes.....	344.00
	PENSIONERS.....	275.00
3	<b>Heavy Goods Vehicle -</b> A motor vehicle (including a special purpose vehicle) constructed principally for the carriage of goods, and with a gross vehicle mass exceeding 4.5 tonnes .....	543.00
4	<b>Medium Motorcycle -</b> A motorcycle with an engine capacity which exceeds 125 cc but does not exceed 250 cc.....	442.00
5	<b>Large Motorcycle -</b> A motorcycle with an engine capacity which exceeds 700 cc.....	442.00
6	<b>Taxi or Chauffeured Hire Car -</b> A public passenger vehicle (luxury hire car or taxi) subject to the <i>Taxi &amp; Luxury Car Industries Act 2008</i>	1062.00
7	<b>Large Passenger Vehicle -</b> A public passenger vehicle used for the carriage of more than 16 passengers or equipped to draw one or more trailers for a like purpose.....	888.00
8	<b>Hire and Drive Vehicle -</b> A passenger carrying motor vehicle which is hired out for reward without the services of a driver.....	888.00
9	<b>Caravan, Horse Float, Plant and Machinery (Non self-propelled) -</b> Any caravan, horse float or plant and machinery with an unladen mass exceeding half a tonne, which is designed to be drawn by a motor vehicle (excluding any trailer) .....	45.00
10	<b>Heavy Trailer -</b> A trailer, the unladen mass of which exceeds half a tonne and not included in Class 9.....	101.00
11	<b>Mobile Crane -</b> A mobile crane (excluding a towtruck).....	363.00
12	<b>Restricted Registration Vehicles, including Farm Motor Cycles -</b> Off-road and restricted registration vehicles not otherwise provided for in Classes 15 or 18, including ride on lawn mowers capable of exceeding 10 kph.....	47.00
13	<b>Plant and Machinery (Self-Propelled) -</b> A tractor (other than a farm tractor), road roller, motor street flusher, tar sprayer, tar roller, motor eductor, street sweeper, excavator, traction engine, road grader, fork lift truck, motor end loader, traxcavator, trench digger, bulldozer, earth moving machine or any similar kind of vehicle not otherwise specified in this class .....	130.00
14	<b>Motor Trade Plate -</b> A motor vehicle used under the authority of a trade plate issued under the <i>Vehicle and Traffic Act 1999</i>	363.00
15	<b>Farm Tractor -</b> A tractor used for agricultural purposes only (whether registered or not).....	130.00
16	<b>Medium Passenger Vehicle -</b> A public passenger vehicle, other than a taxi or chauffeured hire car, used for the carriage of no more than 16 passengers or equipped to draw one or more trailers for a like purpose.....	543.00
17	<b>Small Motorcycle -</b> A motorcycle with an engine capacity which does not exceed 125 cc.....	172.00
18	<b>Off Road and Recreational Vehicles -</b> A trail bike, mini-bike, all terrain vehicle (ATV), dune buggy or any other off-road or recreational vehicle either covered by restricted registration or not required to be registered.....	204.00
19	<b>Short Term Unregistered Vehicle -</b> A vehicle that is subject to a short-term unregistered vehicle permit.....	34.00
20	<b>Medium Large Motorcycle -</b> A motorcycle with an engine capacity which exceeds 250 cc but does not exceed 700 cc.....	442.00
21	<b>Vintage Motor Vehicle or Street Rod -</b> A vehicle that is registered as a vintage motor vehicle or street rod .....	34.00
22	<b>Special Interest Vehicles</b> A special interest vehicle as defined under the <i>Vehicle and Traffic (Driver Licensing and Vehicle Registration) Regulations 2000</i> .....	111.00

## A.1 Pensioner Discount

The Government Prices Oversight (MAIB Premiums) Order 2009 specifies that the pensioner discount is available to the following:

- a) a pensioner;
- b) a person who has a severe disability;
- c) a parent or guardian of a person who has a severe disability and has not attained the age of 16 years.

The maximum premium payable in respect of one class 1 or class 2 motor vehicle of an eligible pensioner is 80% of the premium that would otherwise be payable. The maximum premium payable in respect of any other class 1 or 2 vehicle of the eligible pensioner is the same as if the registered operator were not an eligible pensioner. [Note: the restriction of only one discount per pensioner was introduced on 25 August 2008]

For these purposes, a "pensioner" is defined as a person—

- a) who is in receipt of one of the following pensions, allowances or supplements payable under the *Social Security Act 1991* of the Commonwealth:
  - (i) an age pension;
  - (ii) a carer pension;
  - (iii) a disability support pension;
  - (iv) a widow B pension;
  - (v) a wife pension;
  - (vi) a mature age allowance;
  - (vii) a mature age partner allowance;
  - (viii) a newstart allowance;
  - (ix) a widow allowance;
  - (x) a sole parent pension;
  - (xi) a disability wage supplement; or
- b) who is in receipt of one of the following pensions under the *Veterans' Entitlements Act 1986* of the Commonwealth:
  - (i) a disability pension;
  - (ii) a totally and permanently incapacitated pension;

(iii) a war widow or widower's pension;

(iv) a service pension;

(v) a partner's service pension or carer's pension; or

c) who is a holder of a health care card issued in accordance with the *Social Security Act 1991* of the Commonwealth.

*[Note: Category (c) only eligible for discount from 1 July 2008]*

## APPENDIX B      COMPARISON OF MA SCHEMES

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The details in the following table have been extracted from Scheme annual reports and the ABS website.

	NT	NSW	NSW - LSTA	QLD	SA	TAS	VIC	WA	ACT
<b>Scheme /Regulator</b>	Territory Insurance Office – Motor Accident Compensation Division (MAC)	Motor Accidents Authority (MAA)	Lifetime Care and Support Authority (LTCSA)	Motor Accident Insurance Commission (MAIC)	Motor Accident Commission (MAC)	Motor Accidents Insurance Board (MAIB)	Transport Accident Commission (TAC)	Insurance Commission of Western Australia (ICWA)	CTP Regulator, Treasury Directorate.
<b>Current legislation</b>	<i>Motor Accidents (Compensation) Act 1979</i>	<i>Motor Accidents Compensation Act 1999</i>	<i>Motor Accidents (Lifetime Care and Support) Act 2006</i>	<i>Motor Accident Insurance Act 1994</i>	<i>Motor Vehicles Act 1959</i>	<i>Motor Accidents (Liabilities and Compensation) Act 1973</i>	<i>Transport Accident Act 1986</i>	<i>Motor Vehicle (Third Party Insurance) Act 1943</i>	<i>Road Transport (Third-Party Insurance) Amendment Act 2012</i>
<b>Type of Insurer</b>	Public sector	Private Sector		Private sector	Public sector, management outsourced to private insurer	Public sector	Public sector	Public sector	Private sector (NRMA)
<b>Scheme description</b>	No fault	Common Law with statutory limits	Limited no fault scheme	Common law with statutory limits	Common law with statutory limits (but no fault proposed)	No fault with common law rights	No fault with limited common law rights	Common law with statutory limits	Common law
<b>Number of registered Vehicles ('000) as at 31/1/12</b>	141	4,870		3,492	1,275	432	4,286	1,978	267
<b>Number of claims 2011/12</b>	494	13,824		6,500	5,825	2,707	19,002	3,632	
<b>Total claim payments (\$mill) 2011/12</b>	\$39.5	\$1,272		\$810	\$338	\$78	\$1,010	\$420	

## APPENDIX C CLAIMS COST ALLOCATION ISSUES

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### C.1 Introduction

The issue of allocation of costs between vehicles involved in an accident is a fundamental issue when determining the relative cost of various participants in a motor accident compensation scheme.

Costs may be allocated on a number of bases, including:

- **vulnerability** - costs are allocated to the vehicle the claimant occupied;
- **fault** – costs are allocated to vehicles according to the level of responsibility for the accident; or
- **involvement** - costs are shared equally between the vehicles involved.

Alternatively, some combination of allocation methods may be used.

This Appendix considers the advantages and disadvantages of each method.

### C.2 The advantages/disadvantages of each method

There are essentially two steps in determining appropriate premium relativities, both which should be considered separately:

- the actual underlying relativities; and
- the cross-subsidies which are to apply (to meet the objectives and philosophy of the scheme or for various political reasons) and the relativities to be charged as a result.

In order to determine the most appropriate method of allocating costs for the MAIB, it is useful to consider the advantages/disadvantages of various methods if actual premium rates without adjustment for cross-subsidies were to be charged.

It is also worthwhile to note that the impact that the method of allocating claims has on the MAIB's objective of sound financial management is relatively small.

As a monopoly insurer, provided the overall average premium charged is adequate, financial profitability should only be affected where the premium relativities **implemented** have the potential to significantly alter behaviour e.g. avoidance of insurance premium or altering the mix of risks included in the average premium. The premium relativities implemented can be adjusted from the true premium relativities to allow for such issues.

In a private insurance environment however, it is important that both the average premium is adequate and that the premium relativities reflect the level of risk

associated with a particular vehicle class. If premium relativities do not accurately reflect risk, and the relativities of competitors do, then this invites over-priced risks to insure elsewhere and encourages the under-priced risks to remain, thereby threatening profitability.

### C.3 Fault Based Allocation

This methodology involves apportionment of the cost of claims in proportion to each vehicle's assessed contribution to the accident.

The main advantage of this methodology is that the resulting premium relativities pass on the cost of compensation to those groups which are actually causing (or largely responsible) for the accidents.

The main disadvantage of this methodology is that allocation of fault is judgemental, and may be considered inappropriate for No Fault benefits.

Fault based or Common Law benefits are most appropriately allocated in this manner. Even for these benefits however, it may be difficult to determine the proportion of fault for each vehicle.

### C.4 Vulnerability - Cost attributed to vehicle occupied by claimant

This method was used by the MAIB until 2004; in 2005, a new approach was adopted in line with recommendations made in the 2003 GPOC review.

This methodology allocates costs to the vehicle in which the injured person was travelling. Importantly, no apportionment of fault is assessed. It may be inequitable where occupants of larger or better protected vehicles suffer less harm in an accident than occupants of smaller or less well protected vehicles. Irrespective of whether the larger vehicles were deemed to be responsible for the accidents, the cost of injuries to the occupants of the smaller vehicles would be borne by the occupants. An example is provided by recent research indicating that large four wheel drive vehicles cause disproportionate damage to cars and their occupants because the four wheel drives' bumper bars are higher than the cars' impact zones were designed for. This would result in occupants of large four wheel drive vehicles being relatively less injured than occupants in cars with which they were involved in accidents.

On the other hand, as low driver/passenger protection in the cars (or motor cycles) may be a contributing factor to the size of the claims it can be argued that motorists (or riders) should share some of the costs even if they did not cause the accident.

### C.5 Involvement - Cost attributed equally between vehicles involved

This method overcomes the shortcomings of the previous two methods in relation to No Fault benefits. "Fault-based" information is not required to apply the method, and costs are attributed both to the vehicles occupied by the injured claimants and to those causing the accident.

In addition, this methodology would seem to be most consistent with the philosophy behind No Fault benefits. In a no-fault scheme, benefits are provided irrespective of fault, and this method allocates costs irrespective of fault.

This methodology is not consistent with the philosophy behind fault-based benefits. It may be appropriate to apportion costs equally between **defendants** rather than vehicles. This then becomes an administrative simplification of attributing fault.

## C.6 Future Care claims

A further factor that impacts all of the above allocation methodologies is the potential distortion caused by large Future Care claims. A vehicle class with a small number of vehicles can have its experience relativity increase significantly by the occurrence of a single Future Care claim. There are very few of these claims each year, and there is an element of randomness about the occurrence or non-occurrence of a Future Care claim in the various vehicle classes.

In these circumstances, there is an argument that the cost of Future Care claims should be “spread” in some way among vehicle classes.

## C.7 2012 Relativity review

The 2012 review of premium relativities undertaken by Taylor Fry used the same two bases for allocating claim costs as in the 2005 review:

1. **Fault basis:** allocating claim costs according to the degree of fault attributed to the vehicle class (based on the MAIB’s assessment of liability attached to each incident); and
2. **Fault and Future Care spread basis:** allocating non-Future Care costs based on fault, and spreading Future Care costs over all classes.

Prior to the 2005 review, Taylor Fry allocated costs without regard to fault. To provide continuity with previous reviews (for comparative purposes), they also considered the following two bases:

3. **Vulnerability basis:** cost of claims for a vehicle class depends on the vehicle in which the injured person was travelling (for pedestrians and cyclists, costs are allocated to the vehicle they struck); and
4. **Vulnerability and Future Care spread basis:** adopting a vulnerability basis, but spreading the claim costs for Future Care claims over all vehicle classes (to ensure that the small number of these claims does not distort the relativities of any classes).

The basis for spreading Future care costs across vehicle classes was in proportion to the non-Future Care claim costs. This implicitly assumes that the non-Future Care claim costs are a better indicator of risk than other measures (such as vehicle numbers).

A fault based approach was considered appropriate, as it removes the apparent high costs allocated to classes with high risk vehicles (especially motorcycles) and allocates higher costs to those vehicles that are low risk to occupants but have high risks for other road users (such as heavy vehicles).

The Fault based claim cost relativities were taken to represent a practical minimum relativity. The rationale was that the fault based allocation reflects historical claim experience, with most classes having no Future Care claim costs, and this is the minimum claim cost that should be allocated to each class.

The Fault basis with Future Care claims costs spread in proportion to non-Future Care claims costs was taken as a practical maximum relativity for each class. The rationale was that the fault based allocation represents the same non-Future Care allocation, but spreads Future Care claim costs over all classes assuming that the non-Future Care costs reflect the underlying risk of those classes. This is equivalent to assuming that the smaller classes have not experienced any Future Care claims through a combination of small claim numbers, low frequency and luck, and that some allocation of these costs is reasonable. It is arguable how much some of the smaller classes are exposed to the risk of Future care claims, so that this basis was considered to represent a practical maximum for most classes.

The selected historical relativities were then based on the average of the minimum and maximum relativities. This is somewhat subjective, reflecting the view that the correct relativities should lie somewhere between the minimum and maximum values described above, and should not be taken to reflect any precise measure of the appropriate weights of the two relativities. It does highlight the fact that no single methodology of allocating claims costs can be defended as precisely correct, but that the results of a number of methods provides information about the possible range of relativities.

The selected claim experience relativities were then blended with the existing premium relativities, based on the size of each vehicle class and its credibility. This has provided the basis for Taylor Fry's recommendations for changes to the current premium relativities.

## APPENDIX D FINANCIAL PROJECTIONS

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### D.1 Introduction

The following projections are based on the MAIB corporate plan. The forecast payments and outstanding claims provisions have been supplied by Taylor Fry. Claim costs are assumed to increase at Tasmanian AWOTE (weighted average of 3.6% per annum) plus superimposed inflation (Scheduled Benefits 1.5% per annum, Common Law 0.75% per annum and Future Care nil) consistent with the premium basis. These inflated claim costs are discounted at an average rate of 4.5% per annum consistent with the reserving basis as at 31 December 2012. Investment income is based on a real return of 3% above Tasmanian AWOTE (6.6%).

The projections show the projected income, outgo and balance sheet position of the MAIB.

Two premium increase scenarios are shown:

- Scenario 1 premium increases

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1 December 2013	Aust AWOTE (assumed to be 4.0%)
1 December 2014	Aust AWOTE (assumed to be 4.0%)
1 December 2015	Aust AWOTE (assumed to be 4.0%)
1 December 2016	Aust AWOTE (assumed to be 4.0%)

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- Scenario 2 premium increases

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1 December 2013	CPI (assumed to be 2.5%)
1 December 2014	CPI (assumed to be 2.5%)
1 December 2015	Aust AWOTE (assumed to be 4.0%)
1 December 2016	Aust AWOTE (assumed to be 4.0%)

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## D.2 Scenario 1: Aust AWOTE increase on each 1 December from 2013 onwards

	Financial Year End													
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's
<b>Operating Statement</b>														
Gross Written Premium	126,265	133,152	138,310	139,271	140,636	146,091	154,182	162,727	171,818	181,364	191,455	202,091	213,364	225,182
Earned Premium	126,080	130,247	136,475	139,167	140,049	143,147	150,724	159,077	167,965	177,296	187,162	197,559	208,580	220,132
Reinsurance Premium	-5,139	-5,272	-5,344	-5,448	-5,923	-6,315	-6,732	-7,174	-7,644	-8,147	-8,683	-9,255	-9,864	-10,510
Net Earned Premium	120,941	124,975	131,131	133,719	134,126	136,832	143,992	151,903	160,321	169,149	178,479	188,304	198,716	209,622
Movement in DAC	0	0	-43	-23	450	28	29	30	30	31	32	33	33	34
Underwriting (collection) expenses	-2,427	-2,493	-2,637	-2,642	-2,800	-2,870	-2,942	-3,016	-3,092	-3,170	-3,250	-3,332	-3,416	-3,502
Unexpired Risk	-1,710	4,527	0	-428	0	0	0	0	0	0	0	0	0	0
Third party & reinsurance recoveries received	14,457	1,380	5,589	3,453	935	1,605	1,621	1,637	1,723	1,740	1,758	1,775	1,871	1,890
Reinsurance recoveries movement	-3,672	-2,161	1,751	10,037	6,722	156	156	1,922	167	168	169	2,166	181	182
Claims Cost	-74,235	-100,093	-133,559	-200,666	-133,966	-157,128	-166,950	-176,352	-186,916	-197,623	-208,877	-220,351	-233,271	-246,539
Other claim related payments	-463	-494	-419	-428	-430	-450	-470	-490	-510	-530	-550	-570	-600	-630
<b>Underwriting Result</b>	52,891	25,641	1,813	-56,978	5,037	-21,827	-24,564	-24,366	-28,277	-30,235	-32,239	-31,975	-36,486	-38,943

	Financial Year End													
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's
Administration expenses	-5,166	-5,394	-5,371	-5,693	-5,950	-6,177	-6,410	-6,650	-6,900	-7,115	-7,340	-7,619	-7,910	-8,210
Foundation	-906	-947	-687	-698	-1,100	-1,169	-1,233	-1,302	-1,375	-1,451	-1,532	-1,617	-1,707	-1,801
Motorcycle safety strategy	-10	-77	-8	-3	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15
Road safety task force	-3,015	-3,240	-3,400	-3,480	-3,500	-3,700	-3,900	-4,100	-4,300	-4,500	-4,700	-4,900	-5,100	-5,300
Road infrastructure	-1,581	-635	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Expenses</b>	<b>-10,678</b>	<b>-10,293</b>	<b>-9,466</b>	<b>-9,874</b>	<b>-10,565</b>	<b>-11,061</b>	<b>-11,558</b>	<b>-12,067</b>	<b>-12,590</b>	<b>-13,081</b>	<b>-13,587</b>	<b>-14,151</b>	<b>-14,732</b>	<b>-15,326</b>
Other income	0	0	431	207	461	474	487	501	515	530	545	560	576	592
Net Investment Income	-68,519	86,448	76,717	23,085	107,560	80,681	86,301	92,407	99,213	106,344	114,021	122,188	130,571	139,470
<b>Operating Result before tax</b>	<b>-26,306</b>	<b>101,796</b>	<b>69,495</b>	<b>-43,560</b>	<b>102,493</b>	<b>48,267</b>	<b>50,666</b>	<b>56,475</b>	<b>58,861</b>	<b>63,558</b>	<b>68,740</b>	<b>76,622</b>	<b>79,929</b>	<b>85,793</b>
Tax Expense	12,265	-27,497	-17,829	16,506	-30,748	-14,480	-15,200	-16,943	-17,658	-19,067	-20,622	-22,987	-23,979	-25,738
<b>Operating Result after Tax</b>	<b>-14,041</b>	<b>74,299</b>	<b>51,666</b>	<b>-27,054</b>	<b>71,745</b>	<b>33,787</b>	<b>35,466</b>	<b>39,532</b>	<b>41,203</b>	<b>44,491</b>	<b>48,118</b>	<b>53,635</b>	<b>55,950</b>	<b>60,055</b>
Other Comprehensive Income	0	0	103	-947	0	0	0	0	0	0	0	0	0	0
<b>Total Operating Result</b>	<b>-14,041</b>	<b>74,299</b>	<b>51,769</b>	<b>-28,001</b>	<b>71,745</b>	<b>33,787</b>	<b>35,466</b>	<b>39,532</b>	<b>41,203</b>	<b>44,491</b>	<b>48,118</b>	<b>53,635</b>	<b>55,950</b>	<b>60,055</b>
<b>Financial Position</b>														
Shareholders Funds	220,240	271,436	288,638	240,388	305,993	324,203	339,309	362,364	388,314	410,632	439,302	472,056	505,308	541,023
Total Deferred Dividends	42,935	56,981	58,175	23,926	53,659	54,975	52,348	55,637	60,986	61,058	65,669	71,606	76,883	82,571
Outstanding claims reserve	679,220	706,655	766,069	893,751	950,922	1,009,356	1,075,579	1,146,388	1,222,034	1,301,751	1,385,237	1,472,006	1,562,754	1,657,247
Return on average shareholders' funds	-5.7%	30.2%	18.5%	-10.6%	26.3%	10.7%	10.7%	11.3%	11.0%	11.1%	11.3%	11.8%	11.4%	11.5%
<b>Solvency</b>	<b>15.5%</b>	<b>24.2%</b>	<b>25.7%</b>	<b>18.6%</b>	<b>23.4%</b>	<b>24.5%</b>	<b>25.2%</b>	<b>25.9%</b>	<b>26.5%</b>	<b>26.9%</b>	<b>27.0%</b>	<b>27.2%</b>	<b>27.4%</b>	<b>27.7%</b>

Scenario 2: CPI-based increases each 1 December from 2013 to 2014, then Aust AWOTE thereafter

	Financial Year End													
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's
<b>Operating Statement</b>														
Gross Written Premium	126,265	133,152	138,310	139,271	140,636	144,818	150,636	158,091	166,909	176,182	186,000	196,364	207,273	218,818
Earned Premium	126,080	130,247	136,475	139,167	140,049	142,645	148,156	154,677	163,166	172,231	181,829	191,962	202,626	213,912
Reinsurance Premium	-5,139	-5,272	-5,344	-5,448	-5,923	-6,315	-6,732	-7,174	-7,644	-8,147	-8,683	-9,255	-9,864	-10,510
Net Earned Premium	120,941	124,975	131,131	133,719	134,126	136,330	141,424	147,503	155,522	164,084	173,146	182,707	192,762	203,402
Movement in DAC	0	0	-43	-23	450	28	29	30	30	31	32	33	33	34
Underwriting (collection) expenses	-2,427	-2,493	-2,637	-2,642	-2,800	-2,870	-2,942	-3,016	-3,092	-3,170	-3,250	-3,332	-3,416	-3,502
Unexpired Risk	-1,710	4,527	0	-428	0	0	0	0	0	0	0	0	0	0
Third party & reinsurance recoveries received	14,457	1,380	5,589	3,453	935	1,605	1,621	1,637	1,723	1,740	1,758	1,775	1,871	1,890
Reinsurance recoveries movement	-3,672	-2,161	1,751	10,037	6,722	156	156	1,922	167	168	169	2,166	181	182
Claims Cost	-74,235	-100,093	-133,559	-200,666	-133,966	-157,128	-166,950	-176,352	-186,916	-197,623	-208,877	-220,351	-233,271	-246,539
Other claim related payments	-463	-494	-419	-428	-430	-450	-470	-490	-510	-530	-550	-570	-600	-630
<b>Underwriting Result</b>	52,891	25,641	1,813	-56,978	5,037	-22,329	-27,132	-28,766	-33,076	-35,300	-37,572	-37,572	-42,440	-45,163

	Financial Year End													
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's
Administration expenses	-5,166	-5,394	-5,371	-5,693	-5,950	-6,177	-6,410	-6,650	-6,900	-7,115	-7,340	-7,619	-7,910	-8,210
Foundation	-906	-947	-687	-698	-1,100	-1,159	-1,205	-1,265	-1,335	-1,409	-1,488	-1,571	-1,658	-1,751
Motorcycle safety strategy	-10	-77	-8	-3	-15	-15	-15	-15	-15	-15	-15	-15	-15	-15
Road safety task force	-3,015	-3,240	-3,400	-3,480	-3,500	-3,700	-3,900	-4,100	-4,300	-4,500	-4,700	-4,900	-5,100	-5,300
Road infrastructure	-1,581	-635	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Expenses</b>	<b>-10,678</b>	<b>-10,293</b>	<b>-9,466</b>	<b>-9,874</b>	<b>-10,565</b>	<b>-11,051</b>	<b>-11,530</b>	<b>-12,030</b>	<b>-12,550</b>	<b>-13,039</b>	<b>-13,543</b>	<b>-14,105</b>	<b>-14,683</b>	<b>-15,276</b>
Other income	0	0	431	207	461	474	487	501	515	530	545	560	576	592
Net Investment Income	-68,519	86,448	76,717	23,085	107,560	80,640	86,112	91,996	98,591	105,524	112,981	120,935	129,128	137,817
<b>Operating Result before tax</b>	<b>-26,306</b>	<b>101,796</b>	<b>69,495</b>	<b>-43,560</b>	<b>102,493</b>	<b>47,734</b>	<b>47,937</b>	<b>51,701</b>	<b>53,480</b>	<b>57,715</b>	<b>62,411</b>	<b>69,818</b>	<b>72,581</b>	<b>77,970</b>
Tax Expense	12,265	-27,497	-17,829	16,506	-30,748	-14,320	-14,381	-15,510	-16,044	-17,315	-18,723	-20,945	-21,774	-23,391
<b>Operating Result after Tax</b>	<b>-14,041</b>	<b>74,299</b>	<b>51,666</b>	<b>-27,054</b>	<b>71,745</b>	<b>33,414</b>	<b>33,556</b>	<b>36,191</b>	<b>37,436</b>	<b>40,400</b>	<b>43,688</b>	<b>48,873</b>	<b>50,807</b>	<b>54,579</b>
Other Comprehensive Income	0	0	103	-947	0	0	0	0	0	0	0	0	0	0
<b>Total Operating Result</b>	<b>-14,041</b>	<b>74,299</b>	<b>51,769</b>	<b>-28,001</b>	<b>71,745</b>	<b>33,414</b>	<b>33,556</b>	<b>36,191</b>	<b>37,436</b>	<b>40,400</b>	<b>43,688</b>	<b>48,873</b>	<b>50,807</b>	<b>54,579</b>
<b>Financial Position</b>														
Shareholders Funds	220,240	271,436	288,638	240,388	305,993	323,830	337,063	357,006	379,751	398,917	424,505	454,251	484,399	516,858
Total Deferred Dividends	42,935	56,981	58,175	23,926	53,659	54,788	51,244	53,091	57,119	56,084	59,829	65,138	69,883	75,052
Outstanding claims reserve	679,220	706,655	766,069	893,751	950,922	1,009,356	1,075,579	1,146,388	1,222,034	1,301,751	1,385,237	1,472,006	1,562,754	1,657,247
Return on average shareholders' funds	-5.7%	30.2%	18.5%	-10.6%	26.3%	10.6%	10.2%	10.4%	10.2%	10.4%	10.6%	11.1%	10.8%	10.9%
<b>Solvency</b>	<b>15.5%</b>	<b>24.2%</b>	<b>25.7%</b>	<b>18.6%</b>	<b>23.4%</b>	<b>24.5%</b>	<b>25.1%</b>	<b>25.7%</b>	<b>26.2%</b>	<b>26.3%</b>	<b>26.3%</b>	<b>26.4%</b>	<b>26.5%</b>	<b>26.7%</b>