



Queensland CTP Market Briefing

Review of the risk premium for the
2023Q4 underwriting quarter

Peter Mulquiney and Danielle Ling

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www.taylorfry.com.au

Taylor Fry Pty Ltd



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1

Risk Premium

Each quarter, Taylor Fry provides advice to MAIC to assist in its role of setting a pricing band for the QLD CTP Scheme. This market briefing is intended to summarise Taylor Fry's latest advice to MAIC. We suggest that the first-time reader reviews Section 6 before the remainder of this briefing to understand Taylor Fry's role and the structure of our advice.

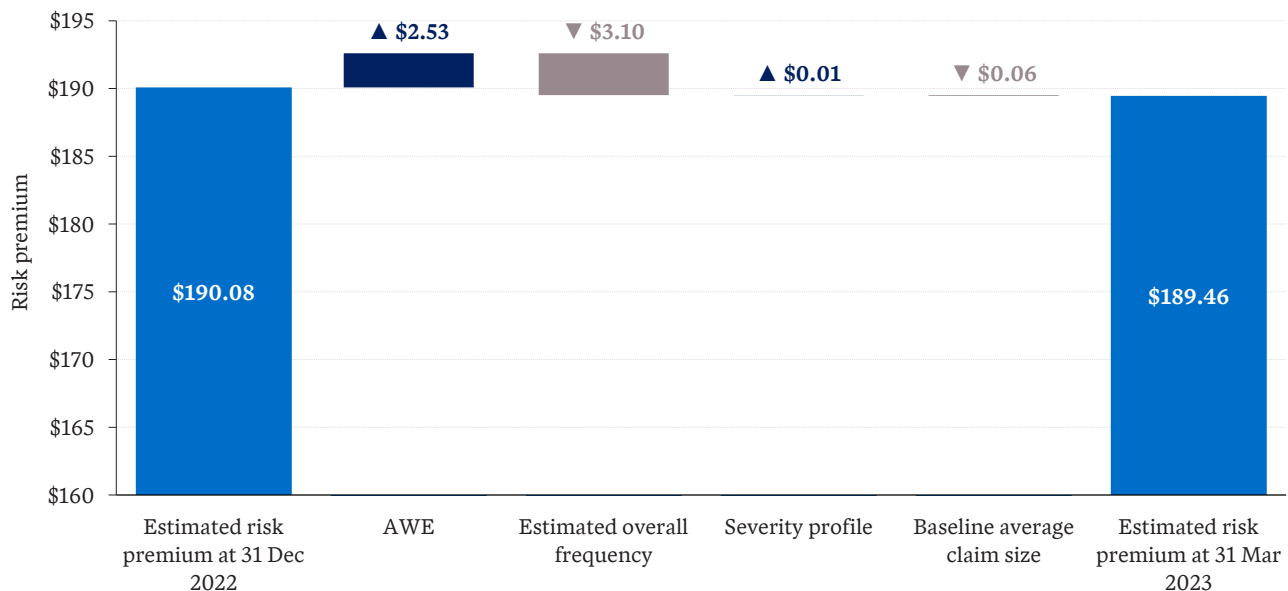
1.1 Risk premium and change since last review

Taylor Fry's **estimated** risk premium is **\$189.46** which is **\$0.62 lower** than our estimate at the previous review. This estimate is in Mar-23 dollars before the application of inflation and discounting. The main contributors to the reduction in estimated risk premium are:

- An increase in **Average Weekly Earnings** (AWE) for QLD over the quarter. Benefit levels have historically been tied to earnings – as such, we base our estimated risk premium on current and projected Average Weekly Earnings.
- Partially offset by a decrease in our **core claim frequency** assumption driven by lower-than-expected experience over the quarter
- Overall changes due to severity profile and average claim size were small.

Figure 1 shows the sizes of the main changes.

Figure 1– Change in estimated risk premium since the Dec-22 review



1.1.1 Components of risk premium

Our estimate is a combination of the risk premium relating to core claims, workers compensation, interstate sharing and NSW postcode claims. The baseline core claims risk premium is based on our estimate of core claims frequency and our estimate of core claim size. Table 1 shows the components of our risk premium estimate.

Table 1 - Estimated risk premium at 31 March 2023

	Risk premium component		Risk premium (\$)
	Frequency (%)	Average claim size (\$)	
Core claims	0.1450%	123,786	179.49
NSW accident postcode claims	0.0054%	145,279	7.81
Interstate sharing	0.0015%	72,876	1.09
Workers' compensation recovery	0.0129%	8,226	1.06
Estimated risk premium at 31 March 2023	0.1650%	114,824	189.46

1.1.2 Risk premium uncertainty

Our risk premium estimate for the 2023Q4 underwriting quarter is highly uncertain. As an illustration of this uncertainty:

- There is approximately one in four chance that the actual risk premium will be *more* than 7.5% higher than our risk premium estimate
- There is approximately one in four chance that the actual risk premium will be *less* than 7.5% lower than our risk premium estimate.

Section 5 discusses risk premium uncertainty in more detail.

2

Frequency

Typically, we review the core claim frequency model at each annual review, with notification experience monitored quarterly, and changes made if appropriate. Our estimated frequency is set using post-claim farming reform notification experience. The frequency assumption and severity profile were previously revised in Dec-22.

This section outlines the assumptions for core claim frequency.

2.1 Core claim frequency

Notifications over the quarter were 5% lower than forecast at Dec-22. The lower than forecast experience was driven by accident quarters Dec-22 and Mar-23.

Adjustments for low traffic volumes over COVID-related lockdown periods and the flood-affected Mar-22 quarter remain unchanged at this review. We have continued to give full weight to the lower frequency experience to date when setting our frequency estimate at this review.

Figure 2 - Estimated annualised core claim frequency as at 31 March 2023

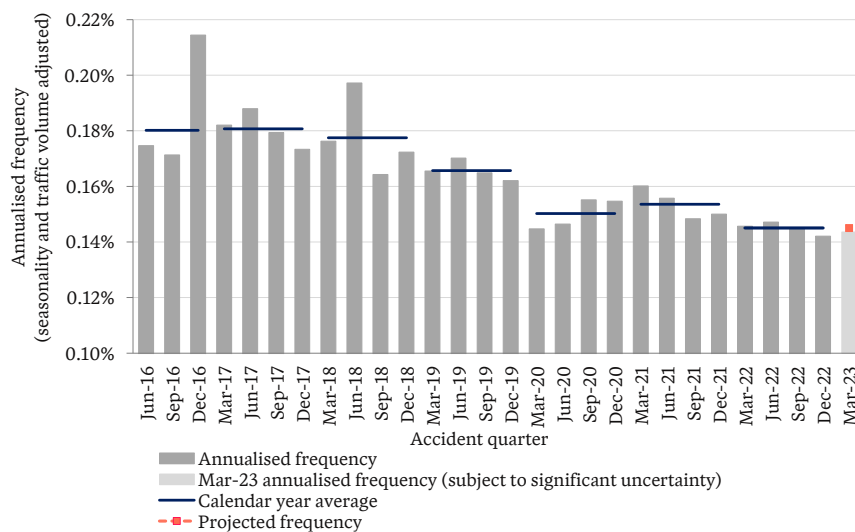


Figure 2 shows the projected ultimate annualised baseline frequency for each historical accident quarter after allowing for seasonality and removing the estimated impact of COVID-19 and the Mar-22 Eastern Australian floods.

Core claim frequency decreased from 2021 to 2022, coinciding with lower traffic volumes observed over 2022. The advised frequency assumption at Mar-23 takes a 4-quarter average over Mar-22 to Dec-22. This advised frequency represents a **1.7% reduction** from the Dec-22 estimate.

3

Severity Profile

3.1 Core claim severity profile

We review the severity profile quarterly.

With the increased level of uncertainty in the severity profile experience after the introduction of claim farming reforms, we continue to closely monitor and respond to emerging experience on a quarterly basis.

This section outlines the assumptions for the baseline severity profile.

Legally represented severity 1 claims (severity 1Y) represent around 70% of core claim notifications and 50% of the core risk premium. While there are relatively few high severity claims, they typically have higher average claim sizes.

Table 2 – Baseline severity profile

Severity	Previous review (Dec-22)	Current review (Mar-23)	Movement
1N	7.5%	7.8%	0.3%
1Y	68.9%	68.2%	-0.7%
2	12.5%	12.8%	0.3%
3	5.8%	5.9%	0.1%
4	0.9%	0.8%	-0.1%
5	0.4%	0.4%	0.0%
6	1.0%	1.0%	0.0%
9NA	3.1%	3.1%	0.1%
Total	100%	100%	

At this review, experience was overall neutral across the severity groups, resulting in a small net **\$0.01 increase** to risk premium.

A reduction in Severity 1Y proportion is offset by an increase in Severity 1N and 2 proportions, with minor movements across higher severity groups.

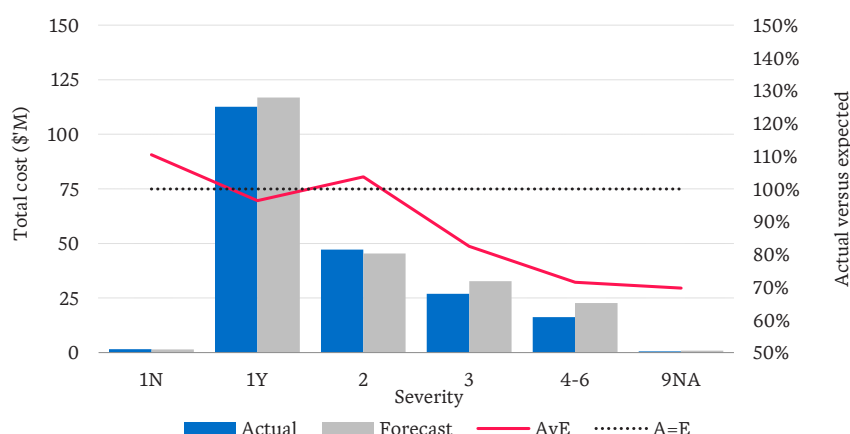
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Average claim size

4.1 Core average claim size

We review the average claim size by severity every quarter based on the payments to finalised claims. In this section, we compare the recent experience for core claims to our assumptions and show the resulting projected average claim size by accident quarter.

Figure 3 – Finalisation experience by severity in Mar-23 against the Dec-22 model



Actual cost for the Mar-23 quarter across all severities was 7% lower than projected at Dec-22.

Severity 1Y claims finalised for 4% lower than forecast.

Severity 1N and 2 claims finalised for 10% and 4% higher than forecast respectively.

Severity 3 claims finalised for 18% lower than forecast, and Severity 4-6 claims finalised for 29% lower than forecast.

Table 3 – Change in core average claim size by severity excluding changes in SP (\$'000, adjusted for inflation)

	Severity								
	1N	1Y	2	3	4	5	6	9NA	All
Baseline at Dec-22	11	93	191	365	703	963	327	14	124
Baseline at Mar-23	12	93	192	364	693	945	329	13	124
Change in baseline	+4.5%	+0.1%	+0.5%	-0.4%	-1.4%	-1.8%	+0.6%	-7.2%	-0.0%

Figure 4 – Average claim size by finalisation quarter

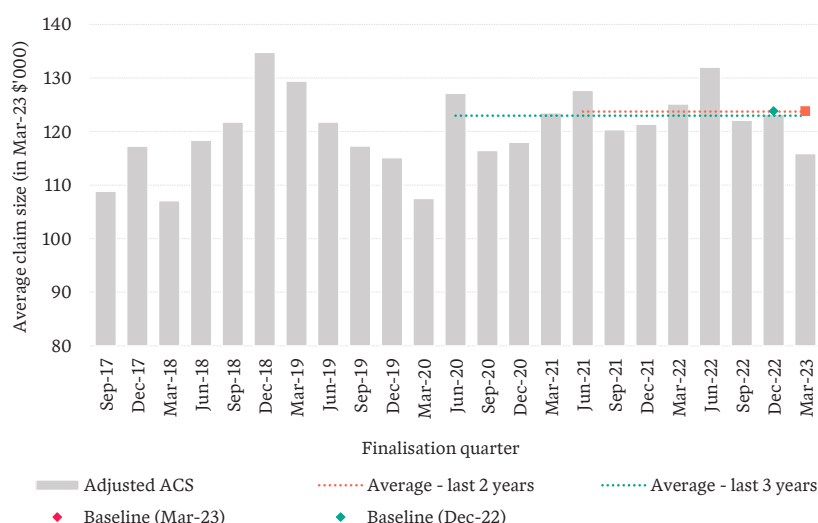
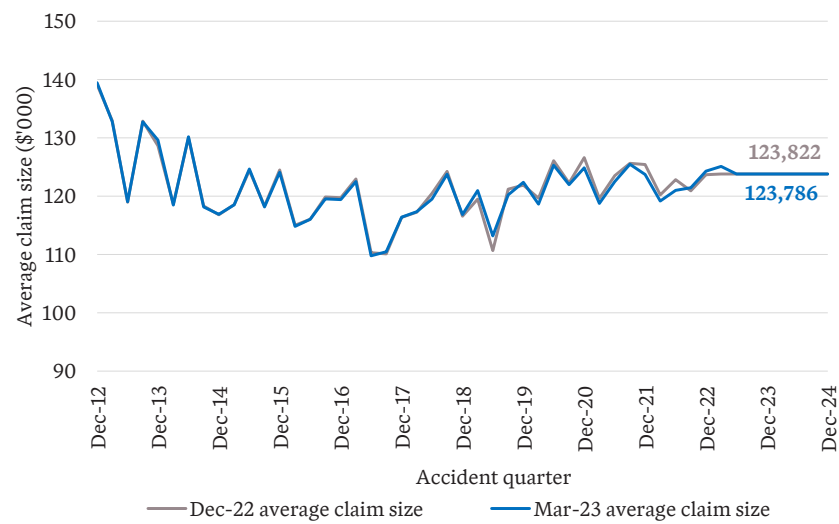


Figure 4 shows historical finalised claim sizes by finalisation quarter, standardised for severity profile and changes in the rate of finalisations across accident periods.

The core average claim size assumed at Mar-23 is largely unchanged from our previous estimate, with slight decreases for Severities 3-5 offset by increases in the lower severity groups.

Our current average claim size assumption is in line with the average experience of the past 2 years.

Figure 5 –Projected average claim size by accident quarter (all severities) (\$'000, adjusted for inflation)



Our projected baseline average claim size has decreased slightly from the previous review. The current estimate is \$123,786.

5

Risk Premium Uncertainty

There is considerable uncertainty in the assumptions underlying our risk premium estimate. We provide risk premium impacts for a range of plausible alternative scenarios.

5.1 Business as usual variation

Our risk premium estimate is highly uncertain. This uncertainty has two main sources:

- Risk premium evolution – the average claim for underwriting quarter 2023Q4 will finalise around four years later than the most recent finalised claim data available at this review. Historically there have been large movements in the risk premium over a four-year period. In general, these movements are not predictable in advance.
- Historical risk premium estimation uncertainty – even for past underwriting quarters where a good volume of finalised claims data is available, there is considerable uncertainty in relation to the cost of claims yet to finalise.

We have quantified this “business as usual variation” and have found that there is an approximately 50% chance that the actual risk premium will fall within the range:

- Estimated risk premium +/-7.5%, or equivalently,
- Estimated risk premium +/- \$14.

5.2 Key uncertainties

In addition, we have identified several key uncertainties that could impact the risk premium. These are summarized in Table 4 and described below.

Table 4 Change in estimated risk premium for plausible alternative scenarios

Risk premium scenarios	Impact on estimated risk premium
Business as usual variation	
Estimated risk premium – 50% confidence interval	+\$14.2 / -\$14.2
Frequency scenarios	
4 quarter averaging period for core claim frequency, without traffic adjustment to Mar-22 AQ	-\$3.1
6 quarter averaging period for core claim frequency	+\$1.9
Increase in proportion of Severity 1 direct claims, shifting from Severity 1Y to Severity 1N, including illustrative ACS impact	-\$0.6
Severity 3+ frequency develops in line with AY2018	+\$2.5
Severity 3+ frequency develops in line with AY2022	-\$2.3
Average claim size (ACS) scenarios	
Severity 1Y ACS emerges in line with the finalisation experience over the last 1 year	-\$3.0
Severity 1Y ACS emerges in line with the finalisation experience over the last 3 years	-\$1.7
Severity 2 ACS emerges in line with the finalisation experience over the last 3 years	+\$0.9
Severity 2 ACS emerges in line with the finalisation experience over the last 4 years	-\$0.4

5.2.1 Uncertainty in the frequency of core claims

Our baseline frequency assumption is based on the average frequency experience over the 4 accident quarters from Mar-22 to Dec-22.

If a 6-quarter averaging period was used instead, which includes the higher frequency experience over Sep-21 and Dec-21, the [risk premium would increase by \\$1.9](#).

We have adjusted frequency for the Mar-22 accident quarter to exclude the effect of the materially lower traffic volumes, due to the Eastern Australian Floods and extended school holidays. If our frequency assumption was based on the same 4-quarter average as our base estimate, but without the traffic volume adjustment to the Mar-22 quarter, the [risk premium would decrease by \\$3.1](#).

5.2.2 Uncertainty in the frequency of Severity 1N and 1Y claims

The proportion of Severity 1N notifications has increased materially since Jun-22.

Our current selection for the proportion of Severity 1N claims is based on the average over accident quarters Dec-19 to Sep-22. As a *fairly aggressive* scenario, we consider calibration of the proportion of Severity 1N claims to experience of the two accident quarters Jun-22 and Sep-22 only, and assume that the increase in the proportion of Severity 1N claims would be entirely due to a shift from Severity 1Y claims. With just the change in severity profile between Severity 1N and Severity 1Y, the [risk premium estimate would decrease by \\$1.8](#).

We expect the average claim size for both Severity 1N and Severity 1Y to increase as a result of the shift between these severities, with less severe 1Y claims expected to be lodged directly as Severity 1N, partially offsetting the \$1.80 decrease discussed above. As an *illustrative example*, assuming that the average cost of claims that move from Severity 1Y to Severity 1N is \$50K, and that legal costs add \$25K to these claims (i.e. the claims would now settle for \$25K under Severity 1N), the [risk premium estimate would decrease by \\$0.6](#) (net change due to shift between Severity 1N and 1Y, along with illustrative ACS impact).

5.2.3 Uncertainty in the frequency of high severity claims

The frequency for high severity claims (3, 4, 5 and 6) has shown a downward trend from accident years 2016 to 2022. Our selected frequency is based on the projected ultimate frequency for the three to four most recent accident years. This results in a frequency between that of AY2018 and AY2022.

If the frequency for 2023Q4 is assumed to emerge similarly to that projected for AY2018 then the [risk premium estimate would increase by \\$2.5](#).

If the frequency for 2023Q4 is assumed to emerge similarly to that projected for AY2022 then the [risk premium estimate would decrease by \\$2.3](#).

5.2.4 Uncertainty in the core average claim size

Severity 1Y average claim sizes increased for finalisations between the Mar-21 and Jun-22 quarters, however 1Y claims have finalised at a lower level since, more closely reflecting experience before Mar-21. Our baseline projection at Mar-23 is based on a mix of a 2-year average for low to mid operational times and a 3-year average for high operational time claims.

If we were to calibrate the ACS to a 1-year average throughout, giving more weight to the recent post-Jun-22 experience, the [risk premium would decrease by \\$3.0](#). If we calibrate the ACS to a 3-year average throughout, reflecting more of the lower experience prior to Mar-21, the [risk premium would decrease by \\$1.7](#).

The Severity 2 average claim size has stepped up materially for finalisations since Dec-20. Our baseline projection at Mar-23 is based on a mix of a 3-year average for low-mid operational times and a 4-year average for high operational time claims.

If we were to calibrate the Severity 2 ACS to a 3-year average throughout, which excludes some of the lower ACS experience before Dec-20, the [risk premium would increase by \\$0.9](#). If we calibrated to a 4-year average throughout, reflecting more of the lower experience prior to Dec-20, the [risk premium would decrease by \\$0.4](#).

6

Structure of
Risk Premium advice

6.1 Structure of Taylor Fry's advice to MAIC

This section describes the components of our advice to MAIC as well as the role of this advice in MAIC's premium setting process.

The **prescribed floor and ceiling premiums** for each underwriting quarter are calculated and set by **MAIC**, based on several inputs, including estimates of the average **risk premium** for the scheme. Taylor Fry estimates the components of the risk premium for the Queensland CTP scheme for each underwriting quarter and advises MAIC on these components.

In estimating the risk premium for each underwriting quarter, we consider “**core**” claims separately from workers' compensation recovery (WC), interstate sharing (IS) and NSW accident postcode (NSW) claims. Each component is separated into the **frequency** of claims per registered vehicle and **average claim size**. These components make up the baseline risk premium.

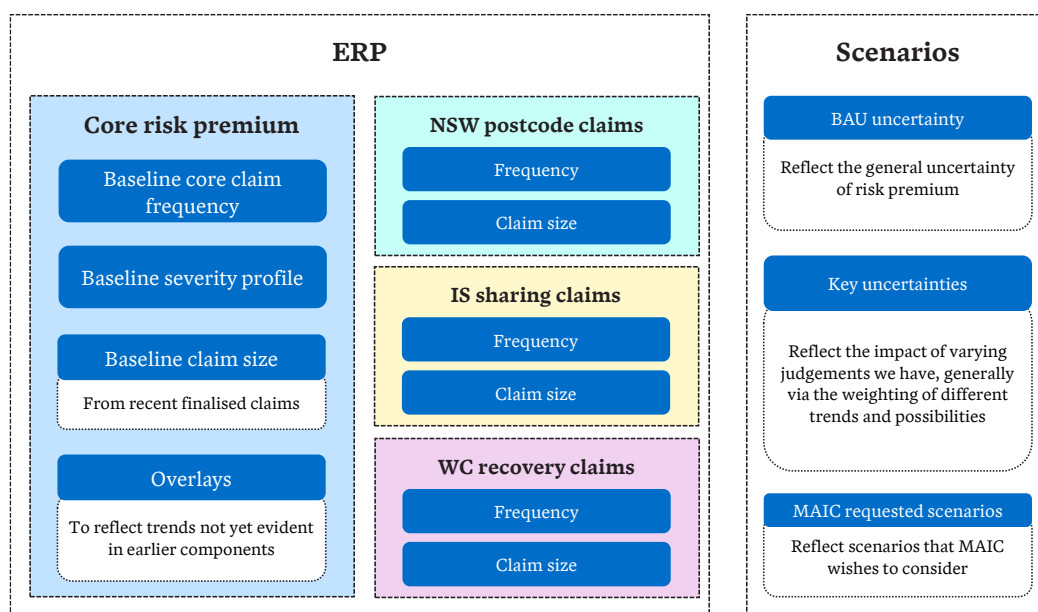
Our Estimated Risk Premium (ERP) for a given future underwriting quarter is comprised of our **baseline risk premium estimate** and **overlays**. The ERP reflects **risk premium** implied by **the most recent past accident periods**, adjusted for the impact of changes which meet the following criteria:

- Evidence of the change can be seen in the data
- The change is quantifiable with reasonable certainty
- We are reasonably confident that the change will continue into the future up until the time most of the cost of claims for the underwriting quarter has been paid.

The risk premium of recent accident years is captured in the baseline risk premium estimate and the other adjustments are made through the overlay component.

There is a large degree of **uncertainty** and **reliance on judgment** apparent in the overlays as they reflect our view of changes to the scheme experience occurring in either the very recent past or the future; the prescribed premiums are set for an accident period approximately one year in the future with claims settling on average 3 years after that.

In addition to the ERP, we provide MAIC with a series of scenarios focusing on key uncertainties in the ERP which reflect potential alternative scenarios relating to possible changes to underlying components of risk premium. Our ERP and scenarios are inputs for MAIC to utilise in their pricing process. We do not expect that MAIC will necessarily adopt our ERP or a risk premium that is within the range covered by our scenarios.



We consider it proper for MAIC to adopt a risk premium different to our ERP based on:

- Adopting a combination of provided scenarios which they consider to be the most likely to occur
- Their anticipation of future changes to the risk premium which we have not allowed for in our ERP or scenarios.



About the Market Briefing

A.1 About the Market Briefing

This report, alongside the accompanying market briefing and associated insurer annex spreadsheet, is provided by Taylor Fry to Queensland Motor Accident Insurance Commission (MAIC) for distribution to QLD CTP insurers each quarter.

Key definitions

Claim	All claims recorded as notified in the Scheme data, other than Nominal Defendant claims, but specifically including those for nil or trivial amounts.
Claim severity	Claim severity refers to our severity band under which a claim falls under, which is a categorisation based on the maximum injury severity score of the claim and the status of the claim's legal representation.
Core claims	Claims excluding those categorised as workers' compensation recovery, interstate sharing claims or NSW accident postcode claims.
Operational time	The rank order of claims finalised from an accident quarter. For example, the first claims finalised have operational times near 0% and the last claims finalised have operational times near 100%.
Interstate sharing claims (IS) claims	Interstate sharing (IS) claims involve one party from Queensland and another from a different state. In some of these cases the claim cost is shared between schemes. These claims are managed by an interstate insurer. They are identified in the database by means of a specific injury code. Claims with a NSW accident postcode are excluded.
Workers' compensation recovery (WC) claims	Workers' compensation recovery (WC) claims are those notified to insurers by a workers' compensation insurer/authority. They have been identified separately in the database since 2009Q1 by means of a specific injury code. Claims with a NSW postcode are excluded.
NSW accident postcode claims	Claims with a NSW accident postcode, including those categorised as core, workers' compensation recovery and interstate sharing claims. They are identified in the database by means of accident postcodes.
Claim frequency	Number of claims per registered vehicle.
Severity profile	The severity profile refers to the final proportion of claims related to each claim severity.
Risk Premium (RP)	Risk premium refers to the average premium required to cover claim costs which is calculated as the total ultimate claim costs of a period divided by the number of registered vehicles. This is equivalent to claim frequency multiplied by average claim size for each severity, summed across all claim severities.
Estimated risk premium (ERP)	The ERP refers to our estimate of risk premium that reflects claims costs for the most recent past accident periods, to the extent we can reliably measure them, adjusted for the impact of changes we are reasonably confident will occur up until the time most of the cost of claims for the underwriting quarter has been paid.
Claim farming reforms	On 5 December 2019, new legislation commenced which aims to stop the practice of insurance car crash scamming (commonly known in the industry as 'claim farming'). Car crash scammers contact unsuspecting people and pressure them (or their family members) to make a CTP insurance claim or share their personal information to law firms for a profit. Car crash scammers have been known to use aggressive tactics and target vulnerable Queenslanders. The legislation makes it illegal in Queensland for lawyers to pay a fee to a car crash scammer.



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