scyne ADVISORY

NT WorkSafe

Actuarial review of Northern Territory workers compensation scheme as at 30 June 2023

March 2024

Disclaimer

This report is not intended to be used by anyone other than NT WorkSafe.

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- to the maximum extent permitted by law and, without limitation, to liability arising in negligence or under statute; and
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Peggy Cheong
Executive Director
NT WorkSafe
Department of Attorney-General and Justice
Northern Territory Government
Ground Floor, Building 3, Darwin Corporate Park
631 Stuart Highway
BERRIMAH NT 0828

18 March 2024

Dear Peggy

Please find our report attached which details our findings from the following analyses for NT WorkSafe:

- Calculation of the funding ratio based on 30 June 2023 outstanding claims liability valuations for insurers and self-insurers
- Calculations of the break-even premium rate for each prior accident year using data to 30 June 2023, including a review of the trends in the required premium and a comparison to the premium rates actually charged by insurers
- An estimate of the break-even premium rate for the 2023/24 underwriting year.

Yours sincerely

Rosi Winn
Fellow of the Institute of Actuaries of Australia

Executive summary

Key findings

The review indicates that the scheme is fairly stable on a financial basis with the break-even premium rate similar to or lower than the actual premium rate charged. However, the profitability on a financial year or 'Form A' basis is variable with the most recent four financial years incurring a profit, though the two years prior to this incurred a loss. The insurer funding ratio is 104% this year (107% at the previous valuation), so in aggregate the insurers' reserves may be sufficient.

Funding Ratio

The funding ratio measures the liabilities held by the insurers (the notional assets) compared to the aggregate outstanding claims liability calculated by the scheme actuary. This is used to represent the ability of the scheme in aggregate to meet its liabilities.

The following table shows the funding ratio as at 30 June 2023 for insurers, self-insurers and for the whole scheme. The Scyne central estimate excludes any risk margin. By comparison, the insurers' provisions include a risk margin, and the self-insurers' provisions are based on the bank guarantee which is 150 per cent of the current central estimate of outstanding claims liability with a minimum of $1 million per self-insurer.

Funding ratio ($000s)	Actual provisions (a)	Scyne central estimate (b)	Difference ($000) (b) - (a)	Funding ratio (a) / (b)	Last year's funding ratio
Insurers	334,336	320,945	-13,391	104%	107%
Self-insurers	6,476	2,245	-4,230	288%	199%
Total	340,812	323,190	-17,621	105%	109%

Notes: see section 2 and 3 of this report

As at 30 June 2023 the insurers' funding ratio was 104% while the self-insurers' funding ratio was 288%. The insurers' funding ratio decreased from 107% as at 30 June 2022 and the self-insurers' funding ratio increased from 199%.

The decrease in the insurers' funding ratio was due to the insurers' provision increasing by less than the increase in our provision compared to 30 June 2022. We are not provided with a reconciliation for the insurers' provisions, so cannot identify the drivers of the insurers' change in provision.

The increase in the self-insurer funding ratio is due to the self-insurers' provisions having increased by more than the increase in our central estimate compared to 30 June 2022. The increase in the self-insurer provision is partially due to the run-off of Catholic Church, with this no longer being part of the self-insurer group for exposures from December 2020 onwards so a higher percentage of the outstanding claims liabilities relate to the smaller self-insurers which have a minimum bank guarantee of $1 million which is significantly higher than their outstanding claims liability.

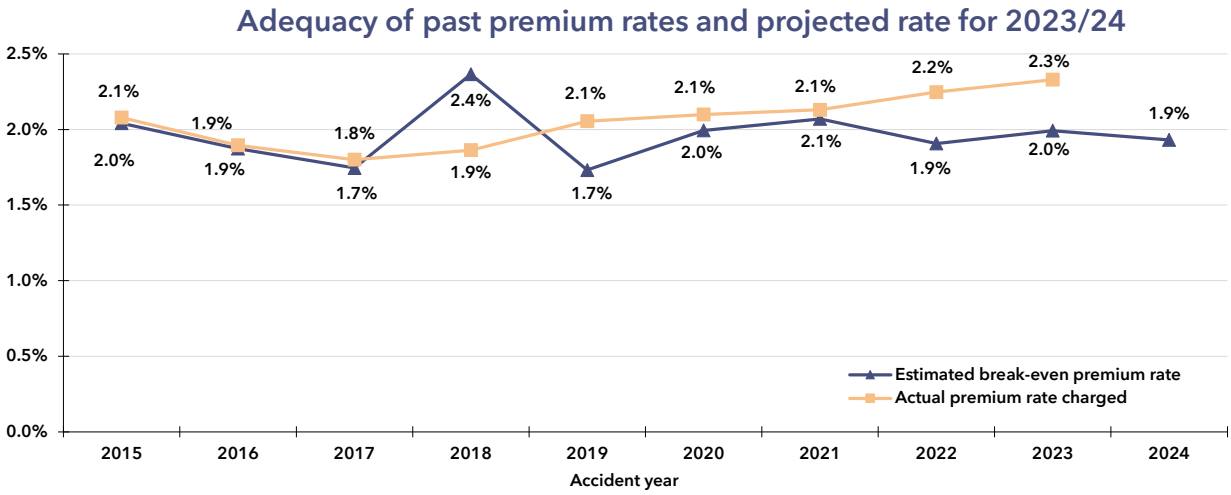
A ratio above 100% implies that, in aggregate, insurers are holding sufficient reserves to be likely to meet our central estimate of future claims costs. This year, the funding ratio has remained above 100%. We make the following comments which should be borne in mind when considering the funding ratio:

- The insurers' actuaries have access to more detailed claims data than we have to estimate the liabilities
- Insurers hold assets in excess of liabilities due to APRA capital requirements and their own risk appetite
- Some insurers may be holding greater than 100% of our notional allocation to them, while others may be holding less. Of concern would be any insurers who are well below 100%.

The above projections involve assumptions about future uncertain claim events and economic, social and legislative conditions and hence the actual outcomes may well be different from the results shown above. This should be borne in mind whenever using the results. In particular, the 2022 and 2023 accident year costs are more uncertain than those for earlier accident years, and hence could ultimately be notably different to those estimated.

Insurer premium adequacy

The following graph shows the estimated break-even premium rates, using all experience to date, and compares this to the actual premium rates charged by insurers. The graph also shows our projected break-even premium rate for 2023/24



The break-even premium rate is calculated on an inflated and discounted basis, gross of reinsurance, and does not allow for a profit margin.

There has been mixed experience in the sufficiency of actual premium rates charged by insurers over 2015 to 2023 shown in the graph above. We estimate that actual premium rates were similar or slightly higher compared to estimates of break-even rates in 2015 to 2017 and 2020 to 2021. The actual premium rate charged is estimated to have been more than sufficient to cover the break-even cost for accident years 2019, 2022 and 2023. The actual premium rate for 2018 was not sufficient to cover the estimated break-even cost.

We estimate that the 2023 developed premiums charged of $176.2 million were $25.5 million (16.9%) higher than the estimated break-even premiums of $150.7 million. The 2023 developed premiums charged are higher than the estimated break-even premium rate in last year's report of $149.1 million, which reflects the higher wages than projected, partially offset by the lower premium rate. Overall,

insurers increased their premium rates between 2019 and 2023 and are responding to the increasing costs in the scheme over the longer term.

The pattern demonstrated in the actual premium rate charged could be driven by changes in the underwriting or economic cycle.

Our projected break-even premium rate for 2024 is 1.9%, which is lower than the estimated break-even premium rate for 2023. We estimated the 2023/24 break-even premium rate to be lower than the most recent year after considering the economic indicators in the 2023/24 Northern Territory budget report.

The estimated break-even premium rates for accident years 2016 to 2023 include an allowance for the 2015 legislative changes. See Appendix B6 for a summary of the changes.

The change in the break-even premium is the average change across all policies. Actual premiums charged to an employer could have greater volatility each year, particularly for small employers, and their change will depend on their experience and size.

Key scheme trends

Claim statistic	Insurers	Self-insurers
Number of claims incurred	Decreasing trend in claim numbers since 2015 to 2023, with 2023 claim numbers (1,830) slightly lower than 2022 (1,863). Similar to claim numbers, the claim frequency demonstrated a general decreasing trend from 2015 to 2023. Frequency is estimated to be 2.2% in 2023, lower than 2022 (2.5%).	General decreasing trend from high 2015 to 2023. In 2023, there are estimated to be 38 claims incurred which is one lower than 39 in 2022 and lower than all prior years. The low claims in 2022 and 2023 is due to claims incurred for Catholic Church only being included as a self-insurer until 1 December 2020, after which claims incurred are classified as an insurer.
Average claim size (in 30 June 2023 values)	2023 average claim size is just over $64,757, which is higher than all prior years, driven by higher average cost to date and fewer small claims reported to 30 June 2023.	Lower than insurers, at $27,712 for the 2023 accident year, which is lower than the past three years but in line with 2018 and 2019.
Incurred cost (in 30 June 2023 values)	2023 incurred cost is $118.5 million, which is higher than 2019 to 2022 due to high average claim size and partially offset by fewer claim numbers.	The incurred cost for 2023 of $1.1 million, is lower than the incurred cost for all prior years. As mentioned above, this is due to Catholic Church not being classified as a self-insurer.

Claim statistic	Insurers	Self-insurers
Gross loss ratio	2023 is 66.1%, which is lower than the loss ratio for prior accident years due to the higher earned premium for 2023.	n/a
Distribution by payment type	Redemption and non-economic lump sums and weekly benefits combined account for about 60% of the total incurred cost and payments each financial year. The distribution of payments for the last eight accident years has remained stable.	n/a

Risks and uncertainties

The key risks and uncertainties to the Northern Territory (NT) scheme are:

- COVID-19

  There is also a degree of uncertainty given the current economic environment and COVID-19, though this uncertainty is reducing.

  In the year to 30 June 2023 there were five new COVID claims reported (excluding government self-insurer claims), though only two of these claims were accepted both with payments to date of less than $2,000. Payments on claims reported to 30 June 2022 increased by $0.278 million due to one claim with significant payments over the year.

  The ultimate impact of COVID-19 will depend upon the percentage of people who can prove they obtained it through work. There may be an increase in claims reported for long term illness, either long COVID or mental stress. There could also be additional mental stress claims from employees who are taking on additional workload while other staff are absent.

  Other potential impacts due to COVID-19 include lengthening claims durations if there are delays in accessing services or delays in the ability for people to return to work. Over time, other impacts may also emerge.

  The overall impact of COVID-19 is still unknown for the projection of 2023/24 injuries. Given the low number of claims to date and average payments to date not being dissimilar to other claims we have not included an explicit allowance for COVID-19 in our 30 June 2023 valuation or our projection of 2023/24 injuries and have not made any adjustments to the risk margin assumptions.

- Inpex project

  Significant increases in wages up to 2018 were driven by the Inpex project and the associated contracts. Following this, wages have decreased by 13% for 2019 and a further 11% decrease for 2020. Up to and including 2017, the number of claims incurred and claims cost have not reflected

the increase in wages, causing the claim frequency and premium rate to reduce. In 2018, the average claim size and incurred cost increased. We understand that over the 2018 financial year the construction phase wound down with production starting in October 2018. Therefore, the number of workers reduced significantly in the 2019 financial year. The premium pool also decreased as the project moved into production phase. This is observed from the decrease of 3% in premium pool for 2019.

As per the previous valuation, we had continued to estimate that the 2018 accident year scheme cost would be significantly higher than prior years. The payments over the 2023 financial year were lower than expected, but the case estimates development was higher than expected.

- Changing economic environment

  There is considerable uncertainty associated with the current economic environment and what it will mean for Australia over the near future. The 2023/24 Northern Territory budget report forecasts that wage growth is expected to increase in the near term due to the tight labour market locally and nationally and the growth outlook for the Territory is heavily influenced by the timing of activity associated with the Barossa project. We have considered the budget commentary and forecasts in the estimates for the 2023/24 premium rate.

- Large claims

  The incurred cost and break-even premium for each accident year are heavily influenced by the presence or absence of any large claims. This is particularly prevalent in the NT due to the small scheme size and the prevalence of very large settlements. Future claims costs will continue to be impacted by very large settlements, with net costs to insurers impacted by the nature and adequacy of any reinsurance arrangements in place.

  Large claims can also have an impact on superimposed inflation. It can be volatile due to the impact of large settlements and the relatively small scheme size. Superimposed inflation had a small increase this year, due to higher legal and lump sum payments. Superimposed inflation should be monitored to make sure increases in costs are understood and ensure that a payment type is not unexpectedly driving an increase in costs.

- 2015 legislative amendments

  The 2015 legislative amendments impacted prospective claims only and were introduced in two stages. The main changes are effective from 1 July 2015, with additional changes effective from 1 October 2015. This creates additional uncertainty in the outstanding claims liabilities for the 2016 to 2023 accident years and the future costs for the 2024 accident year. See 6.5.1 for more details.

  The 2020/21 financial year was the first year where weekly benefits for claims with less than 15% whole person impairment (WPI) will cease for those who have reached 260 weeks of wages and had an accident date after 1 July 2015. We have performed a high-level review to see what impact this has had. For further detail see B6.1.

  For the 2016 and 2017 accident years, the percentage of claims with a weekly benefit payment in development year three (DY3) to DY6 is lower than most years prior to 2016. The lower percentage of claims in DY3 and DY4 may reflect some of the high settlement activity seen for 2016 and 2017 and the lower percentage in DY5 and DY6 may reflect the capping of weekly benefits to five years for claimants with a whole person impairment of less than 15%.

  The percentage of claims with a redemption commutation lump sum payment has a general increasing trend, with most years from 2016 to 2023 higher than the previous years. This could be influenced by a number of aspects including the 2015 legislation changes, the economic

circumstances and the general mix in claim numbers. The average redemption payment in DY3 onwards is noticeably lower in 2016 onwards compared to 2015 and earlier.

The impairment non-economic lump sum payment appears to be paid earlier than historically but there does not appear to be a change in the cumulative percentage of claims receiving an impairment payment in later development years. The average impairment non-economic lump sum is similar before and after the 2015 legislation amendments.

- 2020 legislative amendments

  Most of the 2020 legislative amendments are not retrospective. They are effective from 29 July 2020 so will only impact the 2021 to 2023 accident years for the 30 June 2023 outstanding claims liability and the 2023/24 projections. Some of these changes are a reversal of the 2015 legislative amendments. For the changes that are a reversal, none of them were included in our original costing as their impact was considered to be minimal. The more material changes will mainly affect the government self-insurance claims which are out of scope for the report. The changes to catastrophic injuries may have an impact if the settlements were previously significantly less than the actual lifetime cost.

  We have not made any specific allowance for the 2020 legislative amendments for the 30 June 2023 outstanding claims valuation and 2023/24 projections.

  We recommend NT WorkSafe and insurers closely monitor the experience to ensure that there are no unintended consequences. See Appendix B6 for more information.

- Silicosis claims

  There have been a significant number of silicosis claims in other Australia states that have been reported over the past year. In the NT, there have been no new silicosis claims over the year to 30 June 2023. Therefore, there are three silicosis claims (that are not government self-insurer claims) reported in the NT to date, of which the total paid on these claims were around $32,000.

  Therefore, due to the lack of historical claims and small percentage of business with potential exposure, we have not made a special allowance for these claims in our valuation, as they are unlikely to have a material impact on the total scheme outstanding claims liability or scheme break-even premium rate. Any silicosis claims could impact the premium rates for industry classes and individual employers.

- Psychological injury

  Primary psychological injuries are increasing in number and as a proportion of total claims in other state workers compensation schemes and their costs are often higher than for other injury types. The Safe Work Australia Interactive Data Dashboard on Worker's compensation [1] shows that NT has lower rates of primary psychological injury than most other states.

  Sequela psychological injuries are also increasing nationally, though it can be difficult to accurately identify claims with sequela psychological injuries as the data doesn't clearly capture this.

  We do not separate our analysis by nature of injury, but we monitor the proportion of claims by nature of injury to understand any changes in the claims experience. We will continue to monitor the claims experience to understand if there are any changes in the percentage of claims with primary psychological injuries.

[1] https://data.safeworkaustralia.gov.au/interactive-data/topic/workers-compensation

We recommend NT WorkSafe and insurers also closely monitor the psychological injury experience and explore ways to better capture data on sequela psychological injuries.

Contents

1 About this report

1.1 Context for our review

This report has been prepared for NT WorkSafe and the Scheme Monitoring Committee in accordance with contract number D19-0182, dated 1 October 2019. Under this contract we have conducted the following analyses which are detailed in this report:

- Calculation of the funding ratio based on 30 June 2023 outstanding claims liability valuations for insurers and self-insurers
- Calculations of the break-even premium rate for each prior accident year using data to 30 June 2023, including a review of the trends in the required premium and a comparison to the actual premium rates charged by insurers
- An estimate of the break-even premium rate for 2023/24 based on historic data and future inflation assumptions.

We have prepared this report for the NT workers compensation scheme for the last eleven years. Our previous valuation was conducted using data as at 30 June 2022, the findings of which are detailed in our 21 March 2023 report titled *Actuarial review of Northern Territory workers compensation scheme as at 30 June 2022*.

Our review is for the following five insurers:

- Allianz Australia Insurance Limited (including Territory Insurance Office (TIO))
- CGU Insurance Australia (Part of Insurance Australia Limited)
- GIO Insurance Australia (also known as AAI)
- QBE Insurance Australia
- Catholic Church Insurance (for claims incurred from 1 December 2020)

and the following five self-insurers:

- Coles Supermarkets Australia Pty Ltd
- Wesfarmers Retail Holdings Pty Ltd
- Westpac Banking Corporation
- Woolworths Supermarkets.
- Catholic Church of the NT (Darwin Diocese) (for claims incurred up to 30 November 2020)

The analysis excludes Government Self Insurance and uninsured claims.

At 30 June 2014, TIO was a separate insurer. However, over the 2015 financial year it was purchased by Allianz. Over the 2019 financial year, Wesfarmers Retail Holdings Pty Ltd separated from Coles Supermarkets Australia Pty Ltd as a result of its demerger.

At 1 December 2020, Catholic Church changed from a self-insurer to an insurer in the NT. This change meant that claims incurred up to 30 November 2020 are categorised under Catholic Church of the NT

(Darwin Diocese) (self-insurer), while claims incurred from 1 December 2020 onwards are categorised under Catholic Church Insurance Limited (Insurer).

The report is structured as follows:

- Sections 2 and 3 of this report present the outstanding claims liability valuations for insurers and self-insurers respectively
- Section 4 analyses the break-even premium rates for past underwriting years and the adequacy of the rates actually charged by insurers
- Section 5 details the data and methodology we have used
- Section 6 and section 7 outline the assumptions adopted in this review and considers the uncertainty in the work we have carried out, including some key risks faced.

1.2 Compliance with standards

1.2.1 Outstanding claims liabilities

The approach for calculating the outstanding claims liabilities is consistent with that required by the Accounting Standards for private and State Government general insurers (AASB1023), and APRA's prudential standard CPS320 Actuarial and Related Matters and GPS340 Insurance Liability Valuation where applicable. It also complies with the Actuaries Institute Professional Standard PS302 to the extent possible given the data available.

For reporting periods commencing 1 January 2023 insurers will be required to report under AASB17 rather than AASB1023. For some insurers with a 31 December year end the 30 June 2023 estimates are likely to be under AASB17, while other insurers with a 30 June year end are likely to be reporting under AASB1023. The main differences between the two accounting standards for the outstanding claims liabilities is the discount rate applied and risk margin vs risk adjustment. When comparing against the insurers estimates we have noted these potential differences.

We have not performed a full review of asbestos liabilities due to lack of available data.

1.2.2 Premium rates

Our advice to you complies with the Actuaries Institute Code of Conduct.

2 Insurer outstanding claims liabilities

2.1 Outstanding claims liability

2.1.1 Our estimates

The table below shows our central estimate results by payment type group in current values, including 2015 legislative amendments and excluding claims handling expenses:

Estimates of outstanding claims at 30 June 2023 ($000s) (a) (b)										
	By payment type method						All payments			
Accident year	Weekly Benefits	Medical And Hospital	Allied Health, Vocational Rehabilitation, Non-Compensation Payments (Other), Death	Other Goods And Services	Legals	Redemptions And Non-Economic Lump Sum	Sum of individual payment methods (c)	Combined PCE method (d)	Allowance for active large claims	Total (e)
2014 & earlier	9,244	3,602	3,665	10,448	3,682	33,570	64,211	38,011	4,229	48,789
2015	2,357	512	637	1,949	968	5,506	11,929	6,520	0	7,872
2016	819	172	226	628	785	4,384	7,013	9,505	0	8,882
2017	758	171	215	559	729	4,279	6,711	8,513	0	8,063
2018	1,991	496	632	1,054	2,028	13,974	20,176	18,647	0	19,411
2019	1,799	536	608	829	1,615	10,604	15,991	10,559	0	15,991
2020	2,616	754	868	823	1,963	12,267	19,291	26,420	5,801	25,092
2021	5,253	1,298	1,836	1,130	3,124	20,046	32,688	35,660	6,575	39,263
2022	11,289	3,120	4,470	2,069	4,782	30,090	55,820	59,141	2,445	58,265
2023	22,861	8,875	10,761	4,165	6,227	35,538	88,425	94,371	5,747	94,172
Total	**58,986**	**19,534**	**23,919**	**23,655**	**25,903**	**170,259**	**322,256**	**307,346**	**24,796**	**325,801**

Notes: (a) to (e) from Appendix C4

The table shows that the largest component of the outstanding claims liability relates to the redemptions and non-economic lump sum payment group (52% of the total for individual payments), followed by weekly benefits (18% of the total for individual payments).

Further detail on the parameters adopted to calculate the outstanding claims can be found in Appendix C. For further analysis on the composition of the incurred cost of claims by payment group see Appendix E2.

To generate the gross central estimates, the current value estimates are inflated and discounted, as follows:

Accident year ending 30 June	30 June 2023 values	Inflated values	Infl/disc values
2014 & earlier	48,789	58,748	46,789
2015	7,872	9,559	7,529
2016	8,882	10,476	8,560
2017	8,063	9,436	7,784
2018	19,411	22,875	18,704
2019	15,991	19,303	15,308
2020	25,092	29,361	24,237
2021	39,263	45,086	38,099
2022	58,265	66,005	56,723
2023	94,172	105,512	91,945
Total	**325,801**	**376,361**	**315,678**

An allowance for reinsurance recoveries, claims handling expenses and a risk margin are included in the gross inflated/discounted estimates to arrive at the net outstanding claims provision:

Estimates at 30 June 2023 ($000s)	Gross o/s liability (a)	Reinsurance recoveries (b)	Net o/s liability (c)	Claims handling expenses (d)	Net central estimate (e)	Risk margin (f)	Net Provision (g)
Total	315,678	12,900	302,778	18,167	320,945	38,743	359,688

Notes: (a) from table above

(b) based on the reinsurance information provided by insurers on large claims

(c) = (a) – (b)

(d) = (c) x 6%, see section 6.3 for details of the claims handling expenses

(e) = (c) + (d)

(f) = (e) x 12.07%, see section 7.2.2 for details on the risk margin

(g) = (e) + (f)

The inflated and discounted gross central estimate of $315.7 million is $21.1 million (7.2%) higher than the equivalent estimate as at 30 June 2022. This increase is mostly driven by the significantly higher average claim size for the claims reported for the 2023 accident year and higher than expected development for the 2022 and 2021 accident years.

Net results have only been provided in total, as reinsurance recoveries depend on the large claims experience in each accident year and individual insurers' reinsurance treaties. The net provision at 30 June 2023 is $359.7 million, which is $28.6 million (8.6%) higher than 30 June 2022.

Since the 2016 financial year, insurers have provided us with more information about which claims are likely to receive a reinsurance recovery, to better allow for the estimate of reinsurance recoveries. However, we are not providing this information on an accident year basis in the report for commerciality reasons.

2.1.2 Comparison with insurers

The insurers estimates are shown below.

Insurers' estimates at 30 June 2023 ($000s)	Gross o/s liability	Reinsurance recoveries	Net o/s liability	Claims handling expenses	Net central estimate	Risk margin	Net Provision
Total	304,442	15,539	288,903	17,378	306,281	28,055	334,336

We have compared our gross and net outstanding claim estimates to the insurers' estimates in total. As mentioned above, we have not compared the results by accident year, for insurer commerciality reasons. The comparison of the gross central estimate excluding expenses is shown in the table below.

Gross estimates at 30 June 2023 excluding expenses ($000s)	Insurers' estimate (a)	Scyne estimate (b)	Difference ($000) (b) - (a)	Difference (%) (b) / (a) - 1
Total	304,442	315,678	11,236	3.7%

Notes:(a), (b) = gross inflated and discounted values excluding claims handling expenses

As at 30 June 2023, our gross estimate is $11.2 million (3.7%) higher than that of the insurers. This compares to our estimate being $2.8 million (1.0%) lower than that of the insurers at 30 June 2022. The

difference is due to different underlying methods and assumptions used by the insurers compared to us in the valuation. A key driver of this difference may relate to the uncertainty associated with large claims and future development on these. For insurers who are now reporting on an IFRS17 basis the level of discounting may be higher due to the inclusion of a liquidity margin. The impact is unknown as we don't know which insurers reported under IFRS17 at 30 June 2023 or what liquidity margin they used, though it is unlikely to be the main driver of the difference.

The difference in the net provision is even greater than the difference in the gross central estimate excluding expenses due to different reinsurance recoveries and risk margin assumptions. Individual insurers would be expected to have a lower risk margin than the scheme (on average insurer risk margin is 9.2% compared to 12.1% adopted for the scheme), due to diversification benefits from writing other classes of business.

For insurers who are now reporting on an IFRS17 basis the liabilities require a risk adjustment, the calculation and approach of which is different to the historical risk margin. Overall the average risk margin percentage has increased marginally from 9.1% to 9.2%. One insurer's risk margin has decreased since last year, one has increased and three others are unchanged. These movements may be related to IFRS17 but could also relate to insurer specific circumstances.

Funding ratio

The funding ratio measures the liabilities held by the insurers (the notional assets) compared to the aggregate outstanding claims liability calculated by the scheme actuary. This is used to represent the ability of the scheme in aggregate to meet its liabilities.

For insurers, the funding ratio compares the insurers' net provision (i.e., including risk margin) with our central estimate (i.e., excluding risk margin). This is shown in the table below:

Funding ratio ($000s)	Actual provisions (a)	Scyne central estimate (b)	Difference ($000) (b) - (a)	Funding ratio (a) / (b)	Last year's funding ratio
Insurers	334,336	320,945	-13,391	104%	107%

Notes: (a) as per table above, net provision including risk margin

(b) net central estimate, excluding risk margin

The aggregate funding ratio is 104%, which is a decrease from 107% last year. The decrease in the insurers' funding ratio was due to the insurers' provision increasing by less than the increase in our provision compared to 30 June 2022. We are not provided with a reconciliation for the insurers' provision so we cannot identify the drivers of the insurers' increase. The overall impact of the expense margin and risk margin is unchanged from last year for the insurers. Part of this may be due to differences in allowances for the valuations by payment type and future large claims development.

A ratio above 100% implies that, in aggregate, insurers are holding sufficient reserves to be likely to meet our central estimate of future claims costs. We make the following comments which should be borne in mind when considering the funding ratio:

- The insurers' actuaries have access to more detailed claims data than we have to estimate the liabilities
- Insurers hold assets in excess of their liabilities due to APRA capital requirements and their own risk appetite

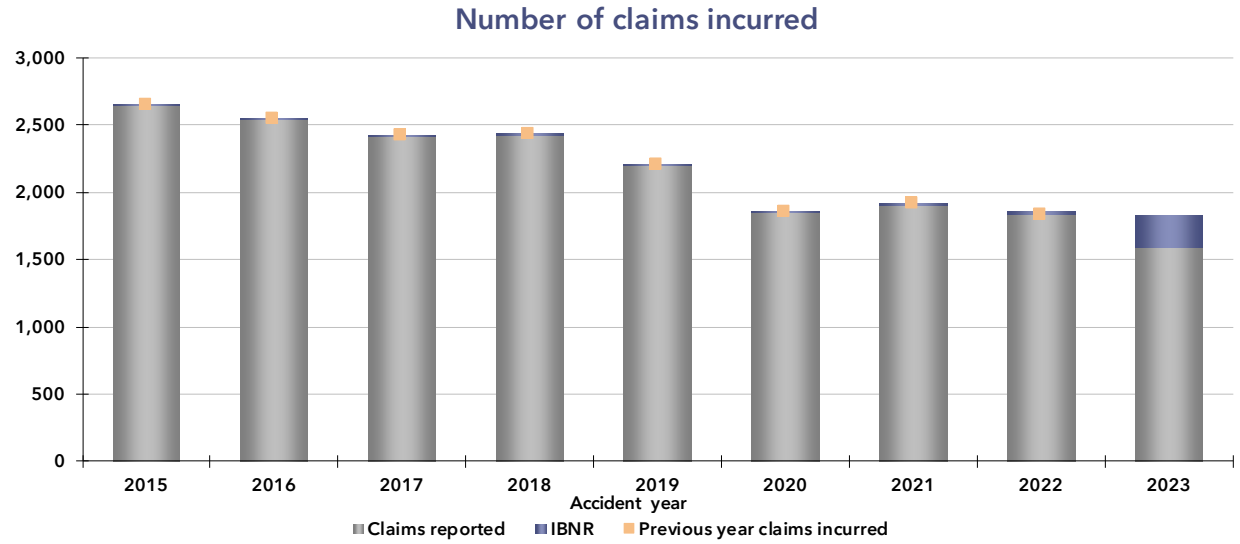
- Some insurers may be holding greater than 100% of our notional allocation to them, while others may be holding less. Of concern would be any insurers who are well below 100%.

2.2 Claims statistics

The following sub-sections show the claims experience by accident year. For more graphs of claims statistics, including by financial year, see Appendices D and E.

2.2.1 Number of claims incurred

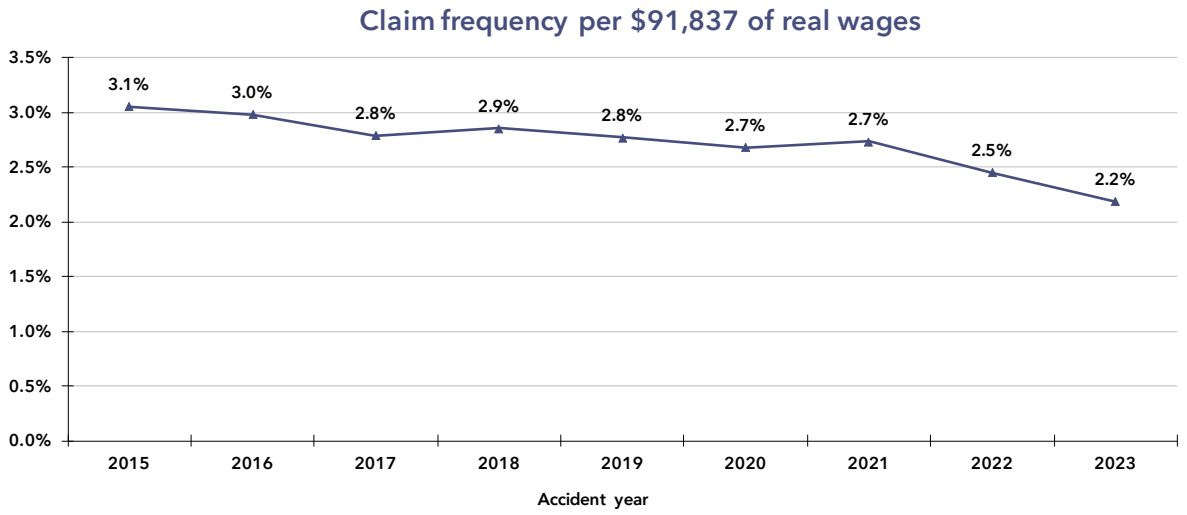
Decreasing trend from 2015 to 2023



The main points to highlight from this chart are:

- The number of claims incurred for the 2015 accident year was about 2,650
- From the 2015 to 2020 accident years, there has been a decreasing trend in the number of claims incurred to 1,850 for the 2020 accident year
- For the 2021 accident year, the number of incurred claims at 1,920 claims is slightly higher than the 2020 accident year but lower than 2019 and all prior years. The increase between 2020 and 2021 is partially due to Catholic Church claims being included in the insurer category from 1 December 2020
- For the 2023 accident year, the number of incurred claims of 1,830 claims is lower than all prior accident years.
- The numbers of claims are similar to those estimated at the previous valuation, except for 2022 which is higher than expected.

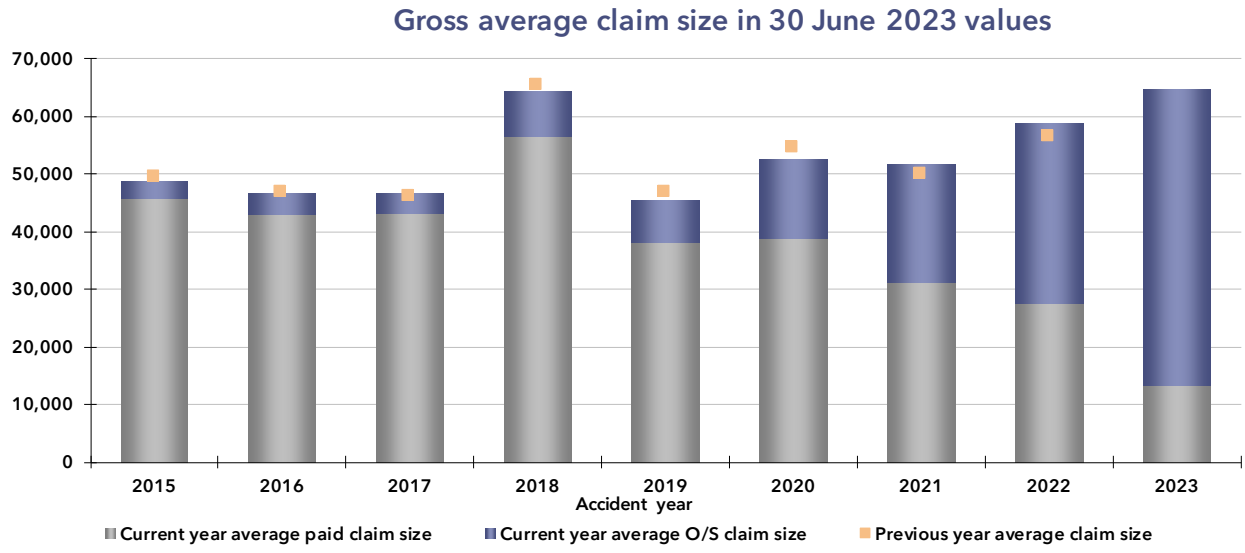
Declining claim frequency due to significant increases in wages up to 2015 and more recently due to reducing number of claims incurred. 2023 is lower than 2022 as the number of claims decreased while wages increased



The $91,837 is the average annual wages for the NT in the 2023 financial year as published by the ABS. See Appendix D1 for the formula to calculate the claim frequency.

2.2.2 Gross average claim size

2023 is estimated to be higher than most prior years except 2018



Since 2015 the gross average claim size (in 2023 values):

- Exhibited volatility due in part to large claims, especially the average of $64,370 in 2018
- Exhibited a broadly increasing trend from around $48,813 in 2015 to around $58,884 in 2022 and $64,757 in 2023

The uncertainty about the future development means that the ultimate level and our estimates may differ from those projected for recent accident years. This is especially true for the 2023 accident year, where a high proportion (79%) of the average claim size relates to uncertain future claims development.

Compared to the previous valuation, the gross average claim size is lower for 2018 to 2020 and higher for 2021 and 2022. This reflects changes in total estimates over the year.

Appendix E contains the average claim size split by payment type. The mix of payment types across the accident years has remained stable. Redemptions and non-economic lump sums are the largest payment type, closely followed by weekly benefits. These payment types account for just under two thirds of total incurred costs.

2.3 Actual vs expected claims experience over 2022/23

2.3.1 Claims incurred up to 30 June 2022

Actual experience compared to the expected experience over 2022/23 for claims incurred up to 30 June 2022 showed:

- Claim reports were 15% higher than expected (250 actual compared to 218 expected)
- The proportion of claims finalised was lower than expected (58.5% compared to 62.1%)
- Claim payments were 11% lower than expected ($77.2 million actual compared to $87.0 million expected)
- Case estimate development was higher than expected (26% actual compared to 20% expected).

Expected experience is taken from the previous scheme report dated 21 March 2023. See Appendix C2 for full details.

The impact of this experience is quantified in the reconciliation in section 2.4.

2.3.2 Claims incurred over 2022/23

The actual experience for claims incurred over 2022/23 compared to expected showed:

- The number of incurred claims was 7.4% fewer than projected for the 2023 accident year in the previous valuation
- There were 854 claims active as at 30 June 2023, which is 24.6% higher than the 685 expected
- The average payment per claim was $13,294, which is 8.4% higher than the $12,267 expected.

The expected experience is based on the adopted parameters used for our 30 June 2022 valuation.

2.4 Reconciliation of estimates

The table below reconciles the gross outstanding claims central estimate, excluding expenses, with the equivalent result as at 30 June 2022.

Reconciliation of gross actuarial estimates, excluding expenses ($000s)									
Accident year ending 30 June		2022	2021	2020	2019	2018	2017	2016	2015 & earlier	Total
A.	Gross estimates at 30 June 2022 (a)	75,985	45,905	35,246	21,438	25,387	7,718	15,070	67,870	294,618
B.	Gross payments 1 July 2022 to 30 June 2023	27,845	12,515	8,330	3,392	4,609	566	5,844	14,105	77,205
C.	Assumed investment return (b)	1,476	943	739	469	549	177	289	1,445	6,086
D.	= A - B + C	49,616	34,332	27,655	18,515	21,327	7,328	9,515	55,211	223,499
	Updated gross estimates at 30 June 2023									
E.	Revised gross estimates at 30 June 2023 (c)	56,723	38,099	24,237	15,308	18,704	7,784	8,560	54,318	223,733
F.	= E - D	7,107	3,767	-3,418	-3,207	-2,623	456	-955	-893	234
	Change 01 July 2022 to 30 June 2023									
G.	Proportion of change attributable to									
	Changes in real rates of return	405	287	196	97	137	62	75	530	1,788
	Change in experience	8,891	4,322	-2,521	-3,892	-3,248	796	354	-451	4,251
	Change in actuarial assumptions	-2,189	-842	-1,092	588	488	-402	-1,384	-972	-5,805
H.	Gross amount incurred and outstanding for 2022/23 accident year (e)									91,945
I.	= E + H									315,678
	Total gross outstanding liability, excluding expenses at 30 June 2023									

Notes: (a) from Appendix C4 of our previous report dated 21 March 2023

(b) calculated using 2.38% p.a. being the one year forward rate from section 6.1 of our previous report dated 21 March 2023

(c) from Appendix C4 of this report.

The table shows that:

- Overall estimates show a strain on reserves of $0.23 million, which is 0.1% of the opening 30 June 2022.estimates. This increase is made up by:
  - $4.3 million strain (1.4%) due to the change in experience
  - $1.8 million strain (0.6% of opening estimates) due to the change in the real rates of return
  - Partially offset by, $5.8 million release (2.0%) due to change in actuarial assumptions
- The changes in real rates of return is due to changes in inflation rates and discount rates, as described in Section 6.1
- The change in experience is due to large strains for the 2022 and 2021 accident years, partially offset by releases for the 2018 to 2020 accident years. For the 2022 accident year there was significantly higher development of total estimates than 2019 to 2021 at the same point in time, also there was a large claim emerge with estimated exceeding $2 million and more claims reported than expected. The 2021 accident year had higher development of total estimates than 2017 and 2019 to 2020 at same point in time due to two large claims emerging with estimates exceeding $2 million.
- The release due to change in actuarial assumptions for all years except 2019 and 2018 is due lower PPCI and PPAC/PPCF factors for many payment types in early development years to reflect recent experience, while factors in the tail have increased. The PCE tail factors have decreased causing the release for 2017 and older years.

3 Self-insurer outstanding claims liabilities

3.1 Outstanding claims liability

3.1.1 Outstanding claims provision

The provision below is based on cumulated claims data across all payment types and self-insurers. Projected payments are inflated and discounted to get to the gross central estimate before application of an allowance for claims handling expenses and a risk margin to calculate the provision.

A breakdown of our results is shown in the table below:

Estimates at 30 June 2023 ($000s)							
Accident year ending 30 Jun	Gross o/s liability (a)	Reinsurance recoveries (b)	Net o/s liability (c)	Claims handling expenses (d)	Net central estimate (e)	Risk margin (f)	Net Provision (g)
Total	2,118	0	2,118	127	2,245	1,123	3,368

Notes: (a) in inflated and discounted values

(b) (a) x 0%

(c) (a) + (b)

(d) assumed to be 6% of the net outstanding liability

(e) = (c) + (d)

(f) a risk margin to increase the provision to allow for the bank guarantee loading, = (d) x 50.0%

(g) = (e) + (f)

The inflated and discounted net provision at 30 June 2023 is $3.4 million, which is $1.1 million (25%) lower than the $4.5 million provision as at 30 June 2022. The decrease is mainly due to lower case estimates for the 2015 and earlier years and 2021 to 2023 accident years than the accident years at the equivalent point in time last year, partially offset by higher case estimates for the 2020 accident year.

3.1.2 Comparison with self-insurers' estimates

We have compared our assessment of the net central estimate to self-insurers' estimates. The results are shown in the table below:

Estimates at 30 June 2023 ($000s)				
Accident year ending 30 Jun	Self-insurers' estimate (a)	Scyne estimate (b)	Difference ($000s) (b) - (a)	Difference (%) (b) / (a) - 1
2017 & earlier	14	2	-12	-88.8%
2018	15	1	-13	-89.8%
2019	27	44	17	64.0%
2020	462	330	-132	-28.6%
2021	492	407	-85	-17.4%
2022	636	562	-74	-11.7%
2023	1,212	900	-312	-25.8%
Total	**2,858**	**2,245**	**-612**	**-21.4%**

Notes: (a), (b) in inflated and discounted values, including claims handling expenses

This comparison shows that our net central estimate is lower than the self-insurers' estimate by $0.6 million (21.4%). This is largely driven by lower estimates for the 2020 to 2023 accident years.

Self-insurer funding ratio

For self-insurers, the funding ratio compares the self-insurers' bank guarantee provision (150 per cent of the current central estimate, with a minimum of $1 million per self-insurer) with our estimate, which excludes any risk margin.

Funding ratio ($000s)	Self-insurers' provision (a)	Scyne central estimate (b)	($000s) (b) - (a)	Difference (%) (b) / (a) - 1
Total	6,476	2,245	-4,230	288%

Notes: (a) bank guarantee provision, net central estimate (from table above) x 1.5

(b) as per table above, net central estimate excluding risk margin

As expected, the funding ratio is well above 100%, given the 150% loading required for the bank guarantee as well as the minimum bank guarantee. This means the current bank guarantee provisions held by self-insurers in aggregate are likely to be adequate to cover future claims costs.

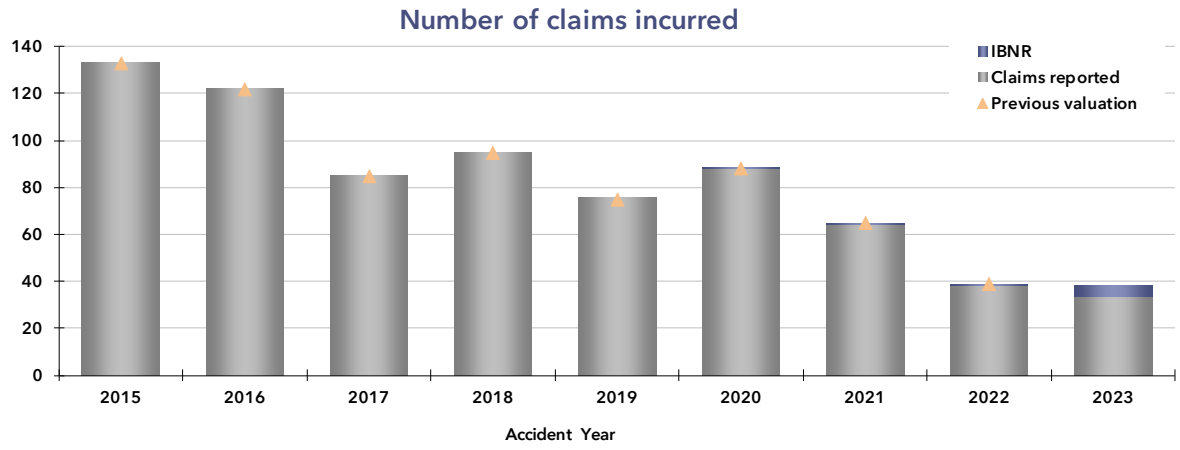
The aggregate funding ratio of 288% is significantly higher than 199% as at 30 June 2022. The increase in the self-insurer provision is partially due to the run-off of Catholic Church from the self-insurer group so a higher percentage of the outstanding claims liabilities relate to the smaller self-insurers which have a minimum bank guarantee of $1 million which is significantly higher than their outstanding claims liability.

3.2 Claims statistics

The following sub-sections show the claims experience by accident year. For more graphs of claims statistics, see Appendix G.

3.2.1 Number of claims incurred

General decreasing trend from 2015 to 2022 at 38 claims

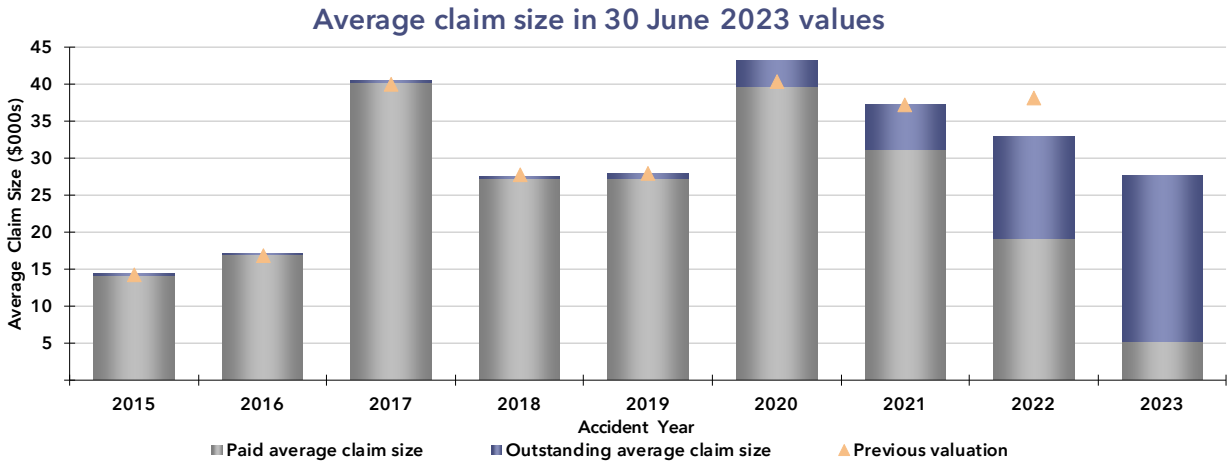


The main points to highlight from this chart are:

- Since the 133 claims in 2015, the number of claims reduced each year to 85 claims in 2017, which was significantly lower than all prior years shown
- From 2017 to 2021 the number of claims incurred has varied between 65 and 95
- For 2022, number of claims incurred decreased to 39. The significant decrease compared to 2021 and all prior accident years is partly due to Catholic Church becoming an insurer from 1 December 2020, so 2021 has five months of Catholic Church claims while 2022 has none.
- For 2023, the number of claims incurred is similar to 2022 at 38 claims, of which four are IBNR claims.
- The numbers of claims are similar to estimates at the previous valuation.

3.2.2 Gross average claim size

2023 average claim size is estimated to be $27,712, which is lower than 2022



The average claim size has been volatile between accident years.

- For 2015 and 2016, the average claim size is lower than more recent years which reflects more smaller claims reported.
- The 2017 and 2020 accident years are higher than its surrounding years due to multiple medium claims (payments over $50,000) and one very large claim in each of 2017 and 2020 (totals estimates over $500,000).
- The 2021 to 2022 accident years are significantly higher than most previous accident years due to fewer small claims reported.
- The 2023 estimated average claim size is similar to 2018 and 2019 due to the average size of claims reported to date being lower than 2020 to 2022 at the same stage of development. There are no medium claims (payments over $50,000) reported to date.

The uncertainty about the future development means that the ultimate level and our estimates may differ from that projected for recent accident years. This is especially true for the 2022 and 2023 accident years, where a high proportion (42% and 81% respectively) of the average claim size consists of the uncertain future estimate.

Compared to the previous valuation, the average claim size for 2015 to 2019 and 2021 are similar, 2020 is higher but 2022 is significantly lower than previously estimated. This is because of higher than expected development for 2020 and lower than expected development for 2022 with fewer large claims reported to date than other years at the same point in time.

3.3 Actual vs expected claims experience over 2022/23

Actual experience compared to the expected experience over 2022/23 for claims incurred up to 30 June 2022 showed:

- Claim reports were higher than expected (4 actual compared to 3 expected)
- Claim payments were higher than expected ($1.9 million actual compared to $1.6 million expected).
- Case estimate development was lower than expected (59% actual compared to 64% expected)

The expected experience is taken from our previous report dated 21 March 2023. See Appendix F for full details. The impact of this experience and our adjustments to future development is quantified in the reconciliation below.

3.4 Reconciliation of central estimates

The table below reconciles the gross outstanding claims central estimate, excluding expenses, with the equivalent result as at 30 June 2022.

Reconciliation of gross actuarial estimates, excluding expenses ($000s)									
Accident year ending 30 June ($000s)	2022	2021	2020	2019	2018	2017	2016	2015 & earlier	Total
A. Gross estimates at 30 Jun 2022 (a)	1,106	889	1,017	120	59	2	2	196	3,390
B. Gross payments 1 July 2022 to 30 June 2023	413	513	982	85	-2	0	0	53	2,045
C. Assumed investment return (b)	21	15	13	2	1	0	0	4	56
D. = A - B + C Updated gross estimates at 30 June 2023	714	390	47	36	63	2	2	147	1,401
E. Revised gross estimates at 30 June 2023 (c)	530	384	311	42	1	1	1	0	1,269
F. = E - D Change 1 July 2022 to 30 June 2023	-184	-6	264	5	-61	-1	-1	-147	-132
G.Proportion of change attributable to									
Changes in real rates of return	3	1	2	0	0	0	0	0	7
Change in experience	-187	75	221	6	-53	-1	-1	-146	-85
Change in actuarial assumptions	0	-83	40	-1	-9	0	0	0	-53
H. Gross amount incurred and outstanding for 2022/23 accident year (c)									849
I. = E + H Total gross outstanding liability, excluding expenses at 30 June 2023									2,118

Notes: (a) from Appendix F4.4 of our previous report dated 21 March 2023

(b) calculated using 2.38% p.a. being the one year forward rate from section 6.1 of our previous report dated 21 March 2023

(c) from Appendix F4.4 of this report.

The table shows that:

- Overall estimates show a release on reserves of $132,000, which is 3.9% of the opening 30 June 2022 estimates. This release is made up of:
  - $85,000 release (2.5%) due to change in experience
  - $53,000 release (1.6%) due to changes in actuarial assumptions
  - Partially offset by $7,000 strain (0.2% of opening estimates) due to changes in the real rates of return

The biggest cause of the release is the 2022 and 2015 and earlier accident years, which decreased due to favourable experience and significantly lower than expected payments and case estimate development over the year. This is partially offset by a strain for the 2020 accident year due to higher development on large claims.

4 Break-even insurer premium rates

4.1 Adequacy of insurer past premiums

The break-even premium rate is calculated on an inflated and discounted basis and is gross of reinsurance, given that each insurer will have a unique reinsurance treaty in place. No allowance for a profit margin has been made, as insurers will set their own margin based on a multitude of factors, and we are interested in the "break-even" premium, which excludes any consideration of profit.

For this analysis, we have allowed for the claims costs and expenses to be discounted to the point that the premium is received. We have used all claims experience available to date to calculate the break-even premium rate.

The following table shows our estimated break-even premium rates and the actual rates charged by insurers:

	Calculated break even premium							Actual premium			
Accident year	Reported earned wages (a) ($000s)	Developed earned wages (b) ($000s)	Discounted gross incurred cost (c) ($000s)	Commission in financial year (d) ($000s)	Discounted other expenses in the fin year (e) ($000s)	Premium (f) ($000s)	Estimated premium rate (g)	Reported earned premium (h) ($000s)	Developed earned premium (i) ($000s)	Actual premium rate charged (j)	Difference (break even - actual) ($000s) (k)
2023	7,294,206	7,562,081	113,301	6,465	30,022	150,669	2.0%	177,204	176,189	2.3%	25,520
2022	6,671,518	6,668,528	104,535	4,927	17,699	127,170	1.9%	151,372	149,842	2.2%	22,672
2021	6,177,331	6,150,575	95,206	4,727	27,297	127,300	2.1%	131,892	131,054	2.1%	3,754
2020	6,025,441	6,025,441	92,077	4,501	23,289	120,158	2.0%	126,481	126,481	2.1%	6,323
2019	6,824,479	6,824,479	92,134	4,701	20,791	118,178	1.7%	140,213	140,213	2.1%	22,035
2018	7,254,718	7,254,718	142,770	5,534	22,576	171,574	2.4%	135,179	135,179	1.9%	-36,395
2017	7,261,995	7,261,995	101,034	4,489	20,620	126,757	1.7%	130,733	130,733	1.8%	3,976
2016	6,833,594	6,833,594	103,034	4,163	20,036	128,011	1.9%	129,530	129,530	1.9%	1,519
2015	6,582,845	6,582,845	108,709	4,558	20,281	134,389	2.0%	136,816	136,816	2.1%	2,428

Notes: (a) earned wages provided by insurers

(b) (a) x development factors in Appendix B7

(c) calculated in Appendix H1

(d) actual commission, from the consolidated Form A returns

(e) other expenses, from the consolidated Form A returns, discounted by half a year

(f) = (c) + (d) + (e) x (1+ one year historical interest rate) ^ (3/12) to allow for the fact that premiums are on average received 3 months after the commencement of the underwriting period

(g) = (f) / (b)

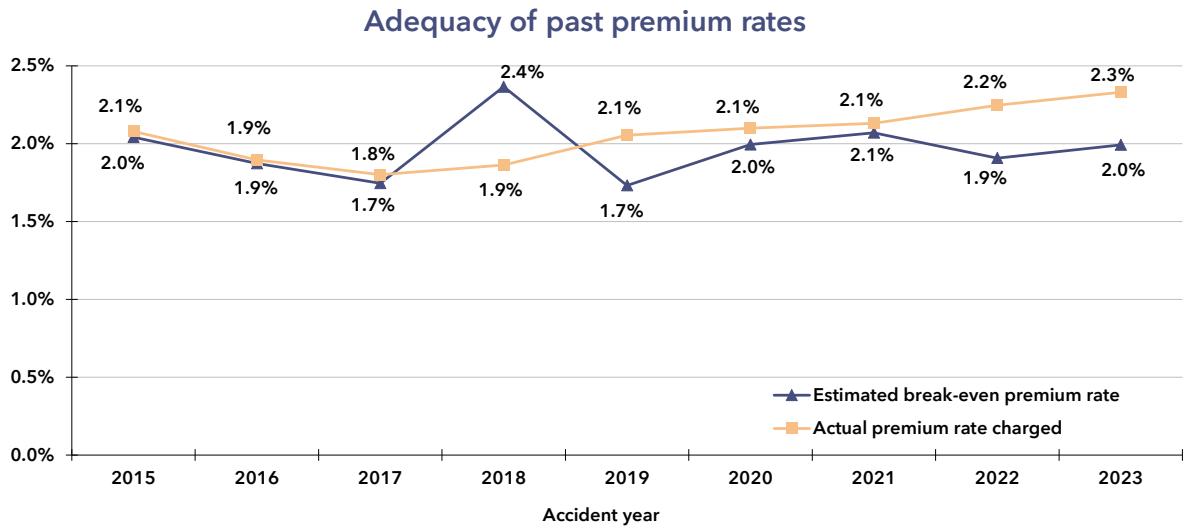
(h) earned premium, including earned but not yet reported premium provided by insurers

(i) (h) x development factors in Appendix B7

(j) = (i) / (b)

(k) = (i) - (f)

We estimate that the 2023 developed premiums charged of $176.2 million were $25.5 million (16.9%) higher than the estimated break-even premiums of $150.7 million.



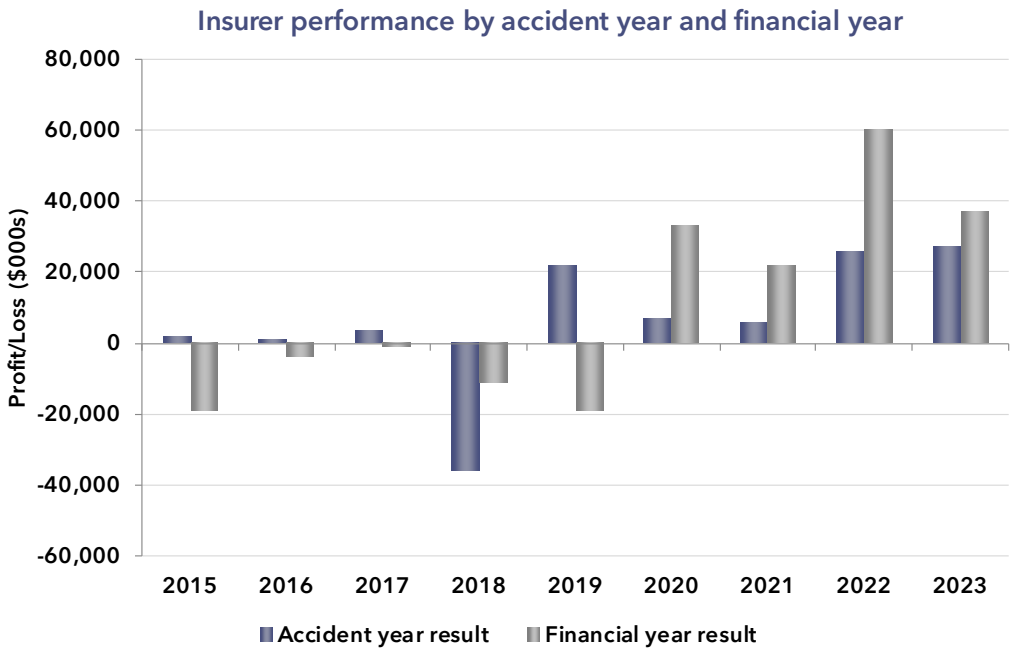
The key points to highlight from the above chart and table may be summarised as follows:

- The actual premium rate charged reduced from 2.1% to 1.8% over 2015 to 2017 before steadily increasing each year to 2.2% for 2022.
- For 2023, actual premium rate charged increased to 2.3% and is higher than the estimated break-even premium rate of 2.0%.
- With hindsight, there has been mixed experience in the sufficiency of actual premium rates charged by insurers over 2015 to 2023 shown in the graph above.
  - The actual premium rate charged is estimated to have been more than sufficient to cover the break-even cost for accident years 2019, 2022 and 2023.
  - For 2015 to 2017 and 2020 to 2021 the actual premiums were similar to slightly higher than the estimates of the break-even rate
  - In 2018 the actual premium rate was less than sufficient to cover break even cost.

Over the past nine years, the actual rate is generally close to or higher than the estimated break-even premium rate. We would expect the premium charged by insurers to be consistently higher than the break-even premium, to incorporate an appropriate profit margin. Insurers will likely use a higher discount rate than Commonwealth yields in their pricing based on a higher expected rate of investment return. This reduces the actual premium rate charged.

Another source of difference between the two rates is reinsurance. We have estimated the break-even rate based on the gross risk cost, whereas the premium rate charged by insurers would factor in reinsurance (both recoveries and cost of a treaty). Assuming that reinsurance is priced to deliver a profit above the expected reinsurance recoveries, then the break-even rate would be expected to increase if an allowance was made for reinsurance.

Using the difference between the actual premium and break-even premium as shown in the table above we have graphed the insurer performance on an accident year basis. The financial year basis comes from the Form A supplied by insurers.



Over the nine years shown in the chart above there is no discernible trend in the insurer profitability. In general, the insurer performance on a financial year basis has been more variable than the performance on an accident year basis, except for the 2018 accident year.

4.2 Forecast break-even insurer premium rate

The following table shows the break-even premium rate projected for the next financial year. For comparative purposes, we have also shown the last five underwriting years.

Underwriting year	Actual wages (a) ($000s)	Discounted gross incurred cost (b) ($000s)	Expenses (c) ($000s)	Premium (d) ($000s)	Calculated premium rate (e)
2019	6,824,479	92,134	25,491	118,178	1.7%
2020	6,025,441	92,077	27,790	120,158	2.0%
2021	6,150,575	95,206	32,024	127,300	2.1%
2022	6,668,528	104,535	22,625	127,170	1.9%
2023	7,562,081	113,301	36,487	150,669	2.0%
2024	7,834,316	120,581	29,106	151,316	1.9%

Notes: (a) 2024 = developed wageroll for 2023 x (1 + 3.6% (wage inflation for 2024)).

(b) 2024 = adopted claims incurred x adopted average claim size in 30 June 2023 values x (1 + wage inflation) x (1 + superimposed inflation) x inflation/discounting factor

1,978 x 61,794 x (1 + 3.6%) x (1 + 1.2%) x 0.9406

(c) 2024 = (b) / (1 – commission rate (3.5%) – other expense rate (15.9%)) – (b)

(d) 2024 = (b) / (1 – commission rate (3.5%) – other expense rate (15.9%)) x (1 + interest rate (4.4%)) ^ (3/12) to allow for the fact that premiums are received on average 3 months after the commencement of the underwriting period

(e) = (d) / (a)

Our projection of the break-even rate for the 2024 underwriting year is reliant on three key items:

- Actual wages are forecast to increase at 3.6%, being the adopted level of future wage inflation
- The future gross incurred cost is the product of the number of incurred claims and an average claim size, allowing for future inflation, superimposed inflation and discounting to reflect the timing of payments
- Expenses are the sum of commission and other expenses, which are both set as a percentage of the total premium.

Superimposed inflation is a measure of the growth in claims cost in excess of wage inflation.

More detailed analysis on the derivation of the four adopted assumptions for the projection (incurred claim numbers, average claim size in 30 June 2023 values, commission rate and other expense rate) are shown in Appendix H.

We considered the economic indicators in the 2023/24 Northern Territory budget report, in adopting the assumptions for the 2024 break-even premium rate.

The adopted average claim size is based on adopted average claim sizes for the 2022 and 2023 accident years. See Appendix B for more details.

5 Data and methods

5.1 Data provided

NT WorkSafe supplied data to us from two sources:

- The internal WIMS database which records details of all claims lodged under the NT scheme
- Insurers' own systems giving details of claims lodged.

The following list sets out the information we received for our review. All data was supplied in electronic form.

- Report 1 – Reconciliation to Form B. NT WorkSafe's comparison of the payments and reports in the WIMS system and provided from insurers' systems
- Report 2 – Data based on date of accident. Unit claims data for all claims lodged by insurers and self-insurers, with accidents grouped by financial year and presented in separate files. This data contained payment information by payment type and development year
- Report 3 – Number of new claims received
- Report 4 – History of payments based on injury date. Claim triangles for reports and payments for each insurer and in total
- Report 5 – List of claims and insurers. Lists all claims since scheme inception by unique identification number and the insurer the claim was lodged with
- Insurer data templates. This included the following information for each insurer:
  - Form A. A simplified profit and loss account showing only the insurance aspects
  - Form B. The number of claims reported and paid during the most recent financial year, and the number of active claims, the case estimates, and the outstanding provision (split by reported and unreported claims) at the end of the most recent financial year, by accident year. This also includes a summary of payments to date and case estimates by accident year for claims with a total incurred cost higher than $500,000
  - Outstanding claims. Specifies the gross outstanding estimate, reinsurance recoveries, claims handling expenses and prudential margin as at 30 June 2023
  - ANZSIC data. Policies, employees, premiums, wages for each ANZSIC category. This is provided on the current processing year and for the most recent five underwriting years
  - Earned but not yet raised premium. Earned but not yet raised premium for each of the five most recent earned years.
  - Large claims. Insurers provided information on each open large claim with total estimates over $2 million and provide information on the claim number, accident date, payments to date, case estimates, total gross estimates, estimated reinsurance recoveries, other information
- For each insurer and self-insurer a list of all transactions in the 2023 financial year
- A list of COVID related claims reported in the 2023 financial year.

We were also provided with copies of valuation reports for some insurers and self-insurers.

We have separated the data to only include the information for the five active insurers, four self-insurers which are active in the scheme and one self-insurer in run-off. These ten companies are:

- Allianz Australia Insurance Limited (including Territory Insurance Office)
- CGU Insurance Australia (Part of Insurance Australia Limited)
- GIO Insurance Australia (also known as AAI)
- QBE Insurance Australia
- Catholic Church Insurance (for claims incurred from 1 December 2020)
- Coles Supermarkets Australia Pty Ltd
- Wesfarmers Retail Holdings Pty Ltd
- Westpac Banking Corporation
- Woolworths Supermarkets.
- Catholic Church of the NT (Darwin Diocese) (for claims incurred up to 30 November 2020)

We have not included Government Self Insurance or uninsured data. The total of nine companies over the 2023 financial year is the same as 2022. As per last year the Catholic Church portfolio has been split into two in the data provided to us. From 1 December 2020, Catholic Church changed from a self-insurer to an insurer in the NT. All claims incurred before 1 December 2020 will continue to be categorised under Catholic Church of the NT (Darwin Diocese) (self-insurer) while claims incurred from 1 December 2020 onward will be categorised under the Catholic Church Insurance (insurer).

For our analyses we have used the data described in the following way:

- Form B returns have been used to find the number of claims reported, the number of claims active and case estimates
- Report 2 files have been combined to obtain payments by payment type for all accident years back to 2002 and up to development year nine.
- Payment figures for the development year 10+, the following approach has been taken:
  - The list of insurers' historical transaction payments provided for the 2009 to 2023 financial years were used to obtain the development year 10+ payments figure, split into the different payment types
- Outstanding claim estimates have been taken from insurers' data templates and self-insurers' actuarial reports
- Assumptions regarding reinsurance recoveries and claims handling expenses have been set by considering the large claim data, insurers' actuarial reports, the Form A returns provided, and with our knowledge and experience of other similar schemes
- ANZSIC data has been used to find the premiums collected and associated wages for our assessment of the adequacy of historic premium rates.

For further details on the data provided, see Appendix A.

5.2 Data quality and reconciliation

Overall, the data NT WorkSafe provided to us was suitable for our purposes, and we found it was broadly consistent across forms.

NT WorkSafe performs an initial set of data quality checks before the data is sent to us. We also conducted a high-level check of the total payments and number of claims between the Form B returns and the WIMS system and found them to be broadly consistent.

The table of the results from these checks can be found in Appendix A.

5.3 Data enhancements and additional data

All past recommendations on data enhancements have been addressed.

It would be useful to get case estimates by claim included in the data, but we understand this is not available and the costs to implement outweigh the benefits. It would also be useful to include the permanent impairment level assessed for a claim, though understand this may also not be available.

We have no further recommendations to enhance the quality of future reviews. We will continue to monitor and investigate the data provided by NT WorkSafe and suggest any future improvement as and when they are identified.

5.4 Projection methods for outstanding claims

We performed two separate valuations for this review, one for insurers and one for self-insurers. The sections below explain the different methodologies used for each valuation.

5.4.1 Insurers' outstanding claims valuation

We assessed the outstanding claims liability for insurers by projecting cash-flows separately for the following groupings of payment types:

- Weekly benefits
- Medical and hospital expenses
- Allied health, vocational rehabilitation, non-compensation other and death
- Other goods and services
- Non-compensation legal
- Redemptions and non-economic lump sum.

These groups are the same as for our previous review. They were selected based on similarities in the underlying nature of the claims likely to arise under each payment type and the payment patterns across development years.

We used a blend of the payments per active claim (PPAC) and payments per claim incurred (PPCI) methods to project payments for the first four of our groups listed above. For the other two groups we used a blend of the payments per claim finalised (PPCF) and PPCI methods.

We also use a combined (of all payment types) projected case estimate (PCE) method for the older accident years, placing more reliance on case estimate information that are set by claims managers.

Payments per claim finalised method

All payments were brought to current values and divided by the numbers of claims finalised in their respective accident years and years of payment. Averages of payments per claim finalised were formed from these figures. These averages were then combined with a projection of future numbers of claims finalised to produce projected future payments.

Payments per active claim method

As described for the payments per claim finalised method, but with a denominator of numbers of claims active at the beginning of the period.

Payments per claim incurred method

All claim payments were brought to current values and divided by the numbers of claims incurred in their respective accident years. A pattern of past payments per claim incurred was derived in respect of each accident year. These payment patterns were then extended into future years and used to project future payments.

Projected case estimates method

We used details of case estimates established at the end of each accounting period, subdivided by accident period. We brought each of these estimates to current values and examined them in comparison with payments made in the subsequent accounting period and the case estimates established at the end of the period (also in current values). Using this we derived an average pattern of the extent to which past case estimates had proven to be too high or too low in relation to the claim payments subsequently made. We used this pattern to project the future development of the case estimates held at 30 June 2023, and to project the future claim payments corresponding to these estimates.

The above methods calculate the projected liability in current values, including allowance for superimposed inflation.

The projected liability in current values is used to calculate the present value of the future claim payments by allowing for:

- Future increases prior to payment, due to claims inflation
- Discounting to take into account the time value of money
- Reinsurance recoveries on the gross future payment amounts
- Expenses associated with administering claims during the run-off period.

To estimate the reinsurance recoveries, we have allowed for the reinsurance recovery information provided by insurers on large claims.

This overall approach is consistent with that required by the Accounting Standards for private and State Government general insurers (AASB1023 and AASB17), and APRA's prudential standard CPS320 and GPS340 for liability valuations for general insurance. It also complies with the Institute of Actuaries of Australia's Professional Standard PS302 to the extent possible given the data available.

For reporting periods commencing 1 January 2023 insurers will be required to report under AASB17 rather than AASB1023. For some insurers with a 31 December year end the 30 June 2023 estimates are likely to be under AASB17, while other insurers with a 30 June year end are likely to be reporting under AASB1023. The main differences between the two accounting standards for the outstanding claims liabilities is the discount rate applied and risk margin vs risk adjustment. When comparing against the insurers estimates we have noted these potential differences.

The question of uncertainty in the estimates and the determination of provisions are discussed in sections 7.1 and 7.2.

5.4.2 Self-insurers' outstanding claims valuation

All analyses were performed after inflating past payments to current values as at 30 June 2023. We have used the PPCI method for our analysis and compared this to projected case estimates based on past development of case estimates for both insurers and self-insurers. We have adopted a blend of the PPCI and PCE methods for all years.

The PPCI and PCE methods are defined above.

We then used the same method applied to insurers to calculate the future claim payments, allowing for (a) to (d) above.

5.5 Approach to estimate break-even premium rates

We take the following steps to estimate the break-even premium rate for historic years:

- Using historic one-year forward rates, discount actual claim payments back to the start of each year
- Using the same set of discount factors, discount the inflated/discounted outstanding claims central estimate (excluding claims handling expenses) from this valuation for each year back to the start of each year
- Sum (a) and (b) to find the total discounted gross incurred cost for each year
- Using the Form A returns to find the levels of commission and other expenses for each financial year
- Sum the discounted gross incurred cost, commission and other expenses, and divide this by the developed earned wages to find the break-even premium rate.

We have allowed for the following timing aspects in the estimated premium:

- Other expenses have been discounted by half a year, to allow for the fact that they are incurred evenly through the year and so on average are paid halfway through the year
- Commission is assumed to be received at the same time as the premium
- Premiums have been inflated by a quarter of a year to allow for a timing delay for when they are actually received by insurers from brokers.

We have used the actual earned premiums from insurers and wages from the ANZSIC data to calculate the actual premium rate charged.

To project the break-even premium rate for 2023/24, we take the following steps:

- From historical data, estimate the incurred number of claims using average claim frequency and projected wages, average claim size, as well as a commission rate and other expenses rate as a proportion of premium
- Calculate the discounted gross incurred cost for the next year by multiplying the incurred number of claims by the average claim size, allowing for one year's inflation and superimposed inflation and discounting
- Calculate the appropriate allowance for expenses using the following formula:
  expenses = incurred cost / (1 – commission rate – other expense rate) – incurred cost
- Sum the estimated incurred cost and expense allowances and divide this by projected wages for the next year, which are estimated as the 2022/23 developed wages inflated by one year. Also, allow for the timing adjustment, as premiums will be received one quarter after policy commencement.

6 Assumptions

6.1 Financial assumptions

Future inflation and interest rates

The financial assumptions of future inflation and market rates of interest are as follows:

Years ahead	Interest rate 30 Jun 2023	Inflation rate 30 Jun 2023	Real rate 30 Jun 2023	30 Jun 2022
1	4.42%	3.60%	0.82%	1.12%
2	4.03%	3.50%	0.53%	1.35%
3	3.70%	3.30%	0.40%	0.85%
4	3.77%	3.10%	0.67%	0.89%
5	3.92%	3.11%	0.80%	0.91%
6	4.04%	3.13%	0.92%	0.93%
7	4.16%	3.14%	1.02%	0.95%
8	4.27%	3.16%	1.11%	0.96%
9	4.36%	3.17%	1.18%	0.96%
10	4.44%	3.19%	1.25%	0.96%
11	4.51%	3.20%	1.30%	0.96%
12	4.56%	3.22%	1.34%	0.94%
13	4.61%	3.23%	1.37%	0.92%
14	4.64%	3.25%	1.39%	0.91%
15	4.65%	3.26%	1.39%	0.89%
16	4.66%	3.28%	1.38%	0.88%
17	4.66%	3.29%	1.36%	0.87%
18	4.65%	3.31%	1.34%	0.87%
19	4.65%	3.32%	1.33%	0.86%
20	4.64%	3.34%	1.31%	0.85%

The 30 June 2023 real rates of return are lower than the 30 June 2022 rates for the first six years and higher thereafter. The overall impact is to increase the liabilities.

The interest rate for one quarter of DY0 ((1 + 4.42%) ^ 0.25 – 1) = 1.09% is included in the calculation of the average premium rate. This is because insurers receive premiums on average three months after the policy commencement date.

See Appendix B1 for further information.

Past wage inflation

Payments and case estimates are inflated to current values based on the ABS Cat 6302.0 Average Weekly Earnings for the Northern Territory (persons full-time adult ordinary time earnings). These are detailed in Appendix B1.

6.2 Superimposed inflation

The superimposed assumptions for each payment category are as follows:

Superimposed Inflation	Weekly Benefits	Medical And Hospital	Allied Health, Vocactional Rehabilitation, Non-Compsenation Payments (Other), Death	Other Goods And Services	Legals	Redemptions And Non-Economic Lump Sum	Total
30 Jun 23	0.5%	1.3%	2.3%	0.0%	2.1%	1.4%	1.2%
30 Jun 22	1.2%	2.2%	3.6%	0.1%	1.7%	0.3%	1.0%

In total, our superimposed inflation estimate of 1.2% p.a. is 0.2% more than the 1.0% p.a. adopted for the previous valuation. Our estimate of superimposed inflation is higher compared to the previous valuation for Legals and Redemptions and other Non-Economic Lump sum payment types and lower for the other payment types.

We calculate the total as a weighted average across the payment groups, weighted by the total outstanding claims estimate.

See Appendix B2 for more details.

6.3 Expenses

Claims handling expenses

We have reviewed the allowances made for claims handling expenses in the insurers' and self-insurers' returns provided to us to set the following claims handling expense assumptions for use in the outstanding claims liability:

- 6% of projected future claim payments for insurers, same as the previous valuation
- 6% of projected future claim payments for self-insurers, same as the previous valuation

Commission and other expenses

Insurers have provided data on historic gross written premiums, earned premiums, commission payments and other expenses as part of their Form A returns. We have used an average of the last two years to set the commission rate, as a proportion of earned premium, and a four year average for the other expense rate, as a proportion of written premium, as follows:

($000s)	Underwriting year					
	2023	2022	2021	2020	2019	Adopted
Gross written premiums (a)	201,987	146,845	145,986	125,789	142,690	
Earned premiums (a)	177,073	146,226	131,769	122,529	144,321	
Commission (a)	6,465	4,927	4,727	4,501	4,701	
Other expenses (a)	30,377	17,701	27,327	23,402	20,986	
Commission rate (b)	3.7%	3.4%	3.6%	3.7%	3.3%	3.5%
Expense rate (c)	15.0%	12.1%	18.7%	18.6%	14.7%	15.9%

Notes: (a), (b), (c), (d) actual values taken from Consolidated Form A

(e) = (c) / (b)

(f) = (d) / (a)

The adopted rate is used in our calculation of the break-even premium rate for the next financial year. To determine the adequacy of past rates we have used the actual dollar values of commission and other expenses paid.

Compared to the previous valuation, the adopted commission rate has remained the same at 3.5%, and the adopted other expense rate has increased from 15.4% to 15.9%. We understand that the low other expenses for 2022 was due to Liability Adequacy Test (LAT) adjustments for one insurer. This year in Form A we got insurers to split out the LAT movement from the other expenses so going forward LAT movement will no longer be included. To moderate the volatility from the other expense rate in prior years we adopted a longer averaging period of four years which lead to the increase.

In total, the commission and other expense rate make up 19.4% of the break-even premium rate, which is higher than the 18.8% adopted for the 30 June 2022 valuation.

6.4 Reinsurance

We have used the additional information provided by insurers to allow for reinsurance recoveries on large claims, which are expected to exceed the retention limit. This is equivalent to 5% of the insurer's gross outstanding claims liability excluding expenses. We compared the reinsurance recoveries based on the large claims with insurers' total reinsurance recoveries and they were similar, though slightly higher, so we did not feel it was necessary to allow for any further reinsurance recoveries on the smaller claims. This is similar approach to last year's valuation.

We reviewed the self-insurers' reports and noted that either they have not allowed for any reinsurance recoveries or they note that reinsurance recoveries are minimal. Therefore, we have not allowed for any reinsurance recoveries for self-insurers.

6.5 Legislation changes

6.5.1 2015 legislative amendments

The 2015 legislative amendments were set out in two parts. The first amendment bill, Workers' Rehabilitation and Compensation Legislation Amendment Bill 2015, passed in March 2015 and came into effect 1 July 2015. The second amendment bill, the Return to Work Legislation Amendment Bill 2015, was passed in August 2015 and came into effect on 1 October 2015.

We costed the following changes in our report titled Actuarial costing of Northern Territory workers compensation scheme changes dated 11 September 2014:

- For claimants with less than 15% permanent impairment (PI) capping weekly benefits to five years and all other benefits to six years
- Extending weekly benefits from 26 weeks to 104 weeks for workers within 6 months of pension age or older than it.

We also provided commentary on some other proposed scheme changes.

The capping of weekly benefits and other benefits to five and six years respectively for claimants with less than 15% PI was estimated to reduce the payments by 54% in development year six and seven onwards for the two categories respectively. The reductions have been applied on this basis to the relevant payment types. This has been allowed for in our calculations of the outstanding claims liabilities as at 30 June 2023 for the 2015/16 to 2022/23 accident years and the future costs for the 2023/24 accident year. There is no allowance for the 2015 legislative changes in the outstanding claims liability as at 30 June 2023 for accident years before 2015/16.

As the scheme changes were broader than covered by our 11 September 2014 report, the actual impact could be different to estimated.

See Appendix B.6.1 for our high level analysis of payments data to understand what the impact of the 2015 legislation amendment has had at the previous valuation.

6.5.2 2020 legislative amendments

The Return to Work Legislation Amendment Act 2020 reverses a number of changes made to the legislation in 2015 as well as adding some new changes. See Appendix B6 for a list of the changes.

We were not asked to cost any of the 2020 legislative amendments.

We note that some of these Act changes are a reversal of the 2015 legislative amendments which weren't costed at the time as they were considered minimal. The more material changes will mainly affect the government self-insurance claims which are out of scope for the report. The changes to catastrophic injuries may have an impact if the settlements were previously significantly less than the actual lifetime cost.

As most changes are not retrospective, they will only impact the 2021 to 2023 accident years for the 30 June 2023 outstanding claims liability and the 2023/24 projections. We have not made any specific allowance for the 2020 legislative amendments for the 30 June 2023 outstanding claims valuation and 2023/24 projections.

7 Uncertainty

7.1 Uncertainty in the estimates

Actuarial estimates are obtained after analysis of past claims experience. From these analyses, models of the claim payment process can be established and used to project future payments on claims outstanding at the valuation date.

The estimates of outstanding claims obtained in this manner are indeed estimates in the sense that there is a degree of uncertainty as to the difference, which will ultimately arise between the estimates and the final result of the experience. This uncertainty arises from four sources:

a. Because the nature of the claims process is not fully understood, it might be that none of the various models used is an entirely accurate representation of reality

b. Because there are components of randomness in the claims process, it is not possible to estimate the parameters of that process with complete precision even if complete confidence were felt in the nature of the model

c. Any erroneous data will similarly have introduced uncertainties into the estimates of those parameters

d. Even if the parameters could be estimated with precision, it would not be possible to predict outstanding claims with the same precision because of the random component in future experience.

For some portfolios, errors associated with b and d above can be quantified in a formal way (estimation and statistical errors). However, a large part of the uncertainty is associated with a (model specification error), and it is difficult to quantify this component.

The investigation and application of different models to the data is intended to reduce the model specification error, although the extent to which this is achieved is unknown.

The initial estimates obtained from the calculations are "central" estimates in the sense that they incorporate no deliberate bias towards over or under estimation. By definition, the estimates are intended to have about an even chance of ultimately turning out to be sufficient.

7.2 Determination of provisions

7.2.1 Background

This valuation is not required to comply with any accounting standards. However, we have considered the requirements of Accounting Standard AASB 1023 on General Insurance Contracts which insurers are required to comply with for their annual valuation.

AASB1023 requires the determination of a central estimate of the present value of the expected future payments for claims incurred with an additional prudential margin to allow for the inherent uncertainty in the central estimate.

As noted earlier, insurers are currently transitioning to a new standard, AASB17, which has broadly similar requirements for central estimates and also requires a margin in the form of a risk adjustment.

It should be realised that, by definition, any margins over central estimates are intended to have a better than even chance of falling into future surplus, provided that future experience is consistent with that of the recent past. This should be considered in making management decisions.

7.2.2 Levels of sufficiency

The nature of insurance claims is such that the actual value of the liabilities is unknown because claims experience is subject to random fluctuations. The amount of the claim liability cannot be estimated with certainty. Also, it is very difficult to determine the central estimate with a reasonable degree of precision. For this reason, the inherent uncertainty in the central estimate must also be considered.

Determination of a risk margin allows for some part of the uncertainties in the claim process and also it ensures as far as possible that surplus is not released until it is reasonably certain that the surplus is real.

The adopted method was tested for its sensitivity to changes in the claim rates assumed and a measure of the variation in the results was obtained. This analysis indicated that the distribution of likely results was skewed to the right. This means that the variation upwards in the provision is expected to be greater than the variation downwards.

The dispersion of expected results is added to by:

- The variable nature of the claim experience
- Very large common law claims can sometimes occur.

The variation analysed together with benchmarking against reports published by APRA and the Institute of Actuaries leads to the assumption of a 20% coefficient of variation of the distribution of results for insurers, which allows for the skew distribution and systemic variation. The lognormal distribution was then assumed to apply when calculating the prudential margin required to increase the level of sufficiency above 50%.

The coefficient of variation for insurers was 20%, on par with our previous valuation. There was no change in the assumed independent risk following an analysis of past payments. This leads to a 12.07% risk margin.

The risk margin applied for self-insurers was 50% for this valuation, which is an increase compared our previous valuation. We selected this risk margin given the reducing size of the self-insurance liabilities and to align with the bank guarantee loading required.

7.2.3 Sensitivity

The adopted method was tested for its sensitivity to changes in the assumptions about future interest and inflation rates, adopted reporting rates, and superimposed inflation, and a measure of the variation in the results was obtained. The results of this analysis for insurers are shown below:

UNCERTAINTY

NT WorkSafe Insurers - sensitivity analysis		
Assumption varied	**Variation**	**% Change in total provision**
Future interest rates	1% increase	-3.55%
	1% decrease	3.90%
Future inflation rates	1% increase	3.89%
	1% decrease	-3.61%
Adopted claim reporting rates	DY0 rate decreased from 13.64% to 6.82%	-1.88%
Superimposed inflation	1% increase	2.90%
	1% decrease	-2.67%
PPCI and PPAC values	10% increase	7.51%
Finalisation rate	10% decrease	9.13%

The increase in PPCI and PPAC factors illustrates a potential impact of an increase in the average claim size either due to claims remaining on benefits for longer or an increase in the frequency of large claims. The decrease in the finalisation rate illustrates a potential impact if claims remain on benefits for longer. Changing these assumptions only impacts some of the valuation methods so the impact should be treated with caution.

The corresponding results for our self-insurer analysis are as follows:

NT WorkSafe self-insurers - sensitivity analysis		
Assumption Varied	**Variation**	**% Change in total provision**
Future interest rates	1% increase	-1.43%
	1% decrease	1.48%
Future inflation rates	1% increase	1.48%
	1% decrease	-1.45%
Incurred claims	10% increase in IBNR claims	0.43%
	10% decrease in IBNR claims	-0.43%
Superimposed inflation	1% increase	0.87%
	1% decrease	-0.86%
Large claims incurred	1 claim of $250,000	7.42%
	2 claims of $250,000	14.84%

The percentage change in the outstanding claim provisions as at 30 June 2023 is shown in the table above. The self insurer portfolio is quite small so it can also be sensitive to variations in claims experience and the potential emergence of moderate to large claims. We have shown two examples of the impact of the late emergence of large claims but other variations in claims experience could occur. The inherent robustness of the various assumptions in the table above means that the variations shown

are not necessarily cumulative. Hence care needs to be exercised in developing any best or worst case scenario.

7.3 Key risks for NT WorkSafe scheme

The following paragraphs detail some of the key risks for the NT WorkSafe scheme.

- COVID-19

  There is a degree of uncertainty given the current economic environment and COVID-19, though this uncertainty is reducing.

  In the year to 30 June 2023 there were five new COVID claims reported (excluding government self-insurer claims), though only two of these claims were accepted both with payments to date of less than $2,000. Payments on claims reported to 30 June 2022 increased by $0.278 million due to one claim with significant payments over the year.

  The ultimate impact of COVID-19 will depend upon the percentage of people who can prove they obtained it through work. There may be an increase in claims reported for long term illness, either long COVID or mental stress. There could also be additional mental stress claims from employees who are taking on additional workload while other staff are absent.

  Other potential impacts due to COVID-19 include lengthening claims durations if there are delays in accessing services or delays in the ability for people to return to work. Over time, other impacts may also emerge.

  The overall impact of COVID-19 is still unknown for the projection of 2023/24 injuries. Given the low number of claims to date and average payments to date not being dissimilar to other claims we have not included an explicit allowance for COVID-19 in our 30 June 2023 valuation or our projection of 2023/24 injuries and have not made any adjustments to the risk margin assumptions.

- Inpex project

  Significant increases in wages up to 2018 were driven by the Inpex project and the associated contracts. Following this, wages decreased by 13% for 2019 and a further 11% decrease for 2020. Up to and including 2017, the number of claims incurred and claims cost have not reflected the increase in wages, causing the claim frequency and premium rate to reduce. In 2018, the average claim size and incurred cost increased. We understand that over the 2018 financial year the construction phase wound down with production starting in October 2018. Therefore, the number of workers reduced significantly in the 2019 financial year. The premium pool also decreased as the project moved into production phase. This is observed from the decrease of 3% in premium pool for 2019.

  As per the previous valuation, we had continued to estimate that the 2018 accident year would be significantly higher than prior years. The payments over the 2023 financial year were lower than expected, but the case estimates development was higher than expected.

- Changing economic environment

  There is considerable uncertainty associated with the current economic environment and what it will mean for Australia over the near future. The 2023/24 Northern Territory budget report forecasts that wage growth is expected to increase in the near term due to the tight labour market locally and nationally and the growth outlook for the Territory is heavily influenced by the timing of activity

associated with the Barossa project. We have considered the budget commentary and forecasts in the estimates for the 2023/24 premium rate.

- Large claims

  The incurred cost and break-even premium for each accident year are heavily influenced by the presence or absence of any large claims. This is particularly prevalent in the NT due to the small scheme size and the prevalence of very large settlements. Future claims costs will continue to be impacted by very large settlements, with net costs to insurers impacted by the nature and adequacy of any reinsurance arrangements in place.

  Large claims can also have an impact on superimposed inflation. It can be volatile due to the impact of large settlements and the relatively small scheme size. Superimposed inflation had a small increase this year, due to higher legal and lump sum payments. Superimposed inflation should be monitored to make sure increases in costs are understood and ensure that a payment type is not unexpectedly driving an increase in costs.

- 2015 legislative amendments

  The 2015 legislative amendments impacted prospective claims only and were introduced in two stages. The main changes are effective from 1 July 2015, with additional changes effective from 1 October 2015. This creates additional uncertainty in the outstanding claims liabilities for the 2016 to 2023 accident years and the future costs for the 2024 accident year. See 6.5.1 for more details.

  The 2020/21 financial year was the first year where weekly benefits for claims with less than 15% whole person impairment (WPI) will cease for those who have reached 260 weeks of wages and had an accident date after 1 July 2015. We have performed a high-level review to see what impact this has had. For further detail see B6.1.

  For the 2016 and 2017 accident years around 23% of claims have a weekly benefit payment in development year one (DY1) which is higher than 19% to 22% of claims for 2015 and earlier accident years. However, the percentage of claims with a weekly benefit payment in DY3 to DY6 for the 2016 and 2017 accident years is lower than most years prior to 2016. The lower percentage of claims in DY3 and DY4 may reflect some of the high settlement activity seen for 2016 and 2017 and the lower percentage in DY5 and DY6 may reflect the capping of weekly benefits to five years for claimants with a whole person impairment of less than 15%.

  The percentage of claims with a redemption commutation lump sum payment has a general increasing trend, with most years from 2016 to 2023 higher than the previous years. This could be influenced by a number of aspects including the 2015 legislation changes, the economic circumstances and the general mix in claim numbers. The average redemption payment in DY3 onwards is noticeably lower in 2016 onwards compared to 2015 and earlier.

  The impairment non-economic lump sum payment appears to be paid earlier than historically but there does not appear to be a change in the cumulative percentage of claims receiving an impairment payment in later development years. The average impairment non-economic lump sum is similar before and after the 2015 legislation amendments.

- 2020 legislative amendments

  Most of the 2020 legislative amendments are not retrospective. They are effective from 29 July 2020 so will only impact the 2021 to 2023 accident years for the 30 June 2023 outstanding claims liability and the 2023/24 projections. Some of these changes are a reversal of the 2015 legislative amendments. For the changes that are a reversal, none of them were included in our original costing as their impact was considered to be minimal. The more material changes will mainly affect

the government self-insurance claims which are out of scope for the report. The changes to catastrophic injuries may have an impact if the settlements were previously significantly less than the actual lifetime cost.

We have not made any specific allowance for the 2020 legislative amendments for the 30 June 2023 outstanding claims valuation and 2023/24 projections.

We recommend NT WorkSafe and insurers closely monitor the experience to ensure that there are no unintended consequences. See Appendix B6 for more information.

- Silicosis claims

  There have been a significant number of silicosis claims in other Australia states that have been reported over the past year. In the NT, there have been no new silicosis claims over the year to 30 June 2023. Therefore, there are three silicosis claims (that are not government self-insurer claims) reported in the NT to date, of which the total paid on these claims were around $32,000.

  Therefore, due to the lack of historical claims and small percentage of business with potential exposure, we have not made a special allowance for these claims in our valuation, as they are unlikely to have a material impact on the total scheme outstanding claims liability or scheme break-even premium rate. Any silicosis claims could impact the premium rates for industry classes and individual employers.

- Psychological injury

  Primary psychological injuries are increasing in number and as a proportion of total claims in other state workers compensation schemes and their costs are often higher than for other injury types. The Safe Work Australia Interactive Data Dashboard on Worker's compensation [2] shows that NT has lower rates of primary psychological injury than most other states.

  Sequela psychological injuries are also increasing nationally, though it can be difficult to accurately identify claims with sequela psychological injuries as the data doesn't clearly capture this.

  We do not separate our analysis by nature of injury, but we monitor the proportion of claims by nature of injury to understand any changes in the claims experience. We will continue to monitor the claims experience to understand if there are any changes in the percentage of claims with primary psychological injuries.

  We recommend NT WorkSafe and insurers also closely monitor the psychological injury experience and explore ways to better capture data on sequela psychological injuries. The review indicates that the scheme is fairly stable on a financial basis with the break-even premium rate similar to the actual premium rate charged. However, the profitability on a financial year or 'Form A' basis is variable with the most recent three out of five financial years incurring a loss. The insurer funding ratio is 104% this year (107% at the previous valuation), so in aggregate the insurers' reserves may be sufficient.

[2] https://data.safeworkaustralia.gov.au/interactive-data/topic/workers-compensation

Appendices

A Detailed data description

A.1 Data supplied by NT WorkSafe

NT WorkSafe supplied data to us from two sources:

- The internal WIMS database which records details of all claims lodged under the NT scheme
- Insurers' own systems giving details of claims lodged with them.

All data was provided in electronic format.

NT WorkSafe perform their own initial reconciliations between the data sources, the main of these being the check of the payments in the WIMS system against payments recorded on the insurers' Form B. We have also performed our own checks between data sources, and these are detailed below.

The data descriptions below fall under two sections; Actuarial data, which is the data supplied from the WIMS system, and Template data which is the data received from insurers.

We were also provided with copies of actuarial valuation reports for some insurers and self-insurers. However, this data is not uniformly presented and so we have not commented on it.

A.1.1 Actuarial data

Five different types of report are run and extracted from the WIMS system. These are each supplied as separate data files.

Report 1 – Reconciliation to Form B

This report contains three items of data:

- NT WorkSafe's reconciliation of payments for the current financial year between the WIMS system against payments recorded on each insurers' Form B. This is done by insurer and in total
- A list of the total payments under each benefit code for the most recent financial year
- A list of all claims on which payments have been made, including details of the claim number, claimant name and amount paid.

We understand that the first sheet listed above is used by NT WorkSafe to reconcile the data before it is provided to us. A target of an absolute difference of no more than 1% is set, and if this is exceeded a manual process is followed to adjust the data on the WIMS system for any human error which has crept in upon data entry. For this valuation, the absolute difference was 0.5%.

Report 2 – Data based on date of accident

We were provided with 10 different files of Report 2 from NT WorkSafe, one for each accident year from 2014. Each of the files contain unit claims data with the following information:

- Unique record identifier
- Claim status (accepted, pending or rejected)

- Dates of report to the employer, lodgement with NT WorkSafe and acceptance or rejection
- Work status of the claimant
- ANZSIC industry classification of the claimant's employer
- Total number of FTE workers for the claimant's employer
- Claimant date of birth
- Claimant sex
- Claimant postcode of residency
- ASCO occupation of claimant
- Duty being performed when injury occurred (for example commuting, on a break)
- Hours normally worked each week
- Normal weekly earnings
- Nature, bodily location, mechanism, agency and breakdown agency of the injury
- Time lost
- Payments for each development year (DY) and grouped for DY10+ for each of the following payment categories:
  - Weekly benefits
  - Lump sum death benefits
  - Lump sum redemptions/commutations
  - Lump sum impairment/non-economic
  - Medical
  - Hospital
  - Allied health services
  - Vocational rehabilitation
  - Other goods and services
  - Non-compensation legal
  - Non-compensation other.
- Name of the insurer or self-insurer who the claim was lodged with.

Several of the above fields (for example claim status, work status) are coded using NT WorkSafe's own coding system. We were provided with the key to this system.

Report 3 – Number of new claims received

This gives a summary of the number of new claims lodged by each insurer in the most recent financial year. The data is summarised in the following three ways:

- Total number of new claims lodged with each insurer
- Number of new claims lodged for each accident year with each insurer

- Number of new claims lodged for each calendar year of injury with each insurer.

Report 4 – History of payments based on injury date

Summarised in this report are the claim payments and reports for insurers. These are shown in the following format:

- Claim triangles of payments for each accident year since 1990 and combined for the pre-1990 accident years, for each insurer and in total
- Claim triangles of reports for each accident year since 1990 and combined for the pre-1990 accident years, for each insurer and in total
- Summary of the number of claim reports and payments made in the current financial year for each insurer for each accident year since 1990 and combined for the pre-1990 accident years.

Report 5 – List of claim and insurers

This report presents a list of all the claims, which have ever been lodged with the scheme, giving the unique claim number and the insurer with which, the claim was lodged.

Self-insurer and insurer transaction data

We were provided with a list of the transaction in the 2023 financial year for each self-insurer and insurer to enable us to determine the payments made in 2022/23 relating to the 2011 and earlier accident years.

COVID-19 claims data

We were provided with a list of the transaction in the 2023 financial year for claims related to COVID-19.

A.1.2 Template data

Insurer's operating under the NT WorkSafe scheme are required to complete and return two statutory forms on an annual basis, Form A and Form B, and are requested to provide extra information to assist in the monitoring of the scheme.

Insurers were provided with a data template in the form of an Excel workbook. This contained Form A and Form B, and tables to record the current outstanding claims liability, and policies, employees, wages and premium by ANZSIC class on both a processing and underwriting year basis, earned but not yet raised premium and large claims.

NT WorkSafe has provided each of the completed template workbooks to us.

Self-insurers provide a shortened version of Form B.

Form A

Form A is a simplified version of the profit and loss account for the insurance aspects of the entity only. The following data items are given for the current financial year:

- Gross premiums
- Re-insurance premiums paid

- Unearned premium at start and end of the year
- Claims paid
- Reinsurance recoveries on claims paid
- Outstanding claims at start and end of the year
- Underwriting profit/loss
- Commission paid
- Other expenses
- Investment income
- Profit/loss.

Form B

Form B contains the following data items in relation to the insurers' claims experience:

- Claims reported
- Claims paid
- Number of reported claims outstanding (active claims)
- Provisions for outstanding claims, broken down by:
- Provisions for claims already reported
- Provisions for unreported claims
- Case estimates for all claims
- For claims with an incurred cost over $500,000:
- Cumulative payments to date
- Case estimates outstanding.

Claims reported and paid are presented broken down by accident year and give the total amount over the year. Active claims, the outstanding provision, and case estimates are also broken down by accident year but show the position as at the end of the year. The large claim information shows payments made in total to date and the case estimate position at the end of the year.

The case estimates for all claims and cumulative payments and case estimates for claims with an incurred cost over $500,000 was first provided last year.

Outstanding claims

This contains the following information for the insurers' outstanding claim liability at the end of the year:

- Gross central estimate
- Reinsurance recoveries
- Claims handling expense
- Prudential margin.

ANZSIC data

The file presents a breakdown of the following five data items by each ANZSIC category:

- Policies
- Employees
- Premiums
- Wages.

This information is given for the current processing year, and for the most recent five underwriting years.

Earned but not yet raised premium

The file contains information of earned but not yet raised premium as at 30 June 2023 for each of the five most recent earned years.

Large claims

Insurers provided information on each open large claim with total gross estimates over $2 million and provide information on:

- Claim number
- Accident date
- Payments to date
- Case estimates
- Total gross estimates
- Estimated reinsurance recoveries
- Other information.

A.2 Data quality

Overall, the data NT WorkSafe provided to us was suitable for our purposes.

NT WorkSafe performed an initial set of data quality checks before sending it to us. We also conducted a high-level check of the total payments and number of claims between the Form B returns and the WIMS system and found them to be broadly consistent.

The following table shows the difference between the cumulative claim payments and reports on Form B and on the WIMS system for insurers only.

DETAILED DATA DESCRIPTION

Accident year	Payments ($000)				Reports			
	Form B	WIMS	Diff	Diff (%)	Form B	WIMS	Diff	Diff (%)
2013 & prior	8,049	9,373	1,323	16.4%	3	0	-3	-100.0%
2014	756	753	-3	-0.4%	1	1	0	0.0%
2015	3,822	4,014	192	5.0%	0	0	0	0.0%
2016	6,151	5,844	-308	-5.0%	1	1	0	0.0%
2017	529	566	37	7.0%	1	2	1	100.0%
2018	4,700	4,609	-92	-1.9%	2	2	0	0.0%
2019	3,421	3,392	-29	-0.8%	3	3	0	0.0%
2020	8,302	8,330	28	0.3%	7	8	1	14.3%
2021	12,741	12,515	-226	-1.8%	14	11	-3	-21.4%
2022	29,229	27,845	-1,384	-4.7%	218	213	-5	-2.3%
2023	24,024	23,925	-98	-0.4%	1,586	1,550	-36	-2.3%
Total	**101,724**	**101,164**	**-559**	**-0.5%**	**1,836**	**1,791**	**-45**	**-2.5%**

This table shows that in total the two systems reconcile reasonably well, with generally minor discrepancies across all accident years.

The following table shows the difference between the claim payments and reports for this financial year by accident year on Form B and on the WIMS system for self-insurers only.

Accident year	Payments ($000s)				Reports			
	Form B	WIMS	Diff	Diff (%)	Form B	WIMS	Diff	Diff (%)
2017 & prior	49	53	4	8.9%	0	0	0	0.0%
2018	-2	-2	0	0.0%	0	0	0	0.0%
2019	85	85	0	0.0%	1	1	0	0.0%
2020	982	982	0	0.0%	0	0	0	0.0%
2021	508	513	5	1.0%	0	0	0	0.0%
2022	419	413	-5	-1.2%	3	3	0	0.0%
2023	193	196	3	1.3%	35	34	-1	-2.9%
Total	**2,234**	**2,241**	**7**	**9.9%**	**39**	**38**	**-1**	**-2.9%**

The information from Form B for the 2023 financial year reconciles fairly well with the WIMS.

We relied upon the WIMS data for this valuation as per previous valuations.

B Assumptions

B.1 Financial assumptions

Future inflation and interest rates

Years ahead	Interest rate 30 Jun 2023	Inflation rate 30 Jun 2023	Real rate 30 Jun 2023	30 Jun 2022
1	4.42%	3.60%	0.82%	1.12%
2	4.03%	3.50%	0.53%	1.35%
3	3.70%	3.30%	0.40%	0.85%
4	3.77%	3.10%	0.67%	0.89%
5	3.92%	3.11%	0.80%	0.91%
6	4.04%	3.13%	0.92%	0.93%
7	4.16%	3.14%	1.02%	0.95%
8	4.27%	3.16%	1.11%	0.96%
9	4.36%	3.17%	1.18%	0.96%
10	4.44%	3.19%	1.25%	0.96%
11	4.51%	3.20%	1.30%	0.96%
12	4.56%	3.22%	1.34%	0.94%
13	4.61%	3.23%	1.37%	0.92%
14	4.64%	3.25%	1.39%	0.91%
15	4.65%	3.26%	1.39%	0.89%
16	4.66%	3.28%	1.38%	0.88%
17	4.66%	3.29%	1.36%	0.87%
18	4.65%	3.31%	1.34%	0.87%
19	4.65%	3.32%	1.33%	0.86%
20	4.64%	3.34%	1.31%	0.85%

The 30 June 2023 real rates of return are lower than the 30 June 2022 rates for the first six years and higher thereafter. The overall impact is to increase the liabilities.

The real rate is estimated to be positive, i.e., interest earned is more than wage inflation, for all projection years. This is similar to our previous valuation.

The interest rate for one quarter of DY0 ((1 + 4.42%) ^ 0.25 – 1) = 1.09% is included in the calculation of the average premium rate. This is because insurers receive premiums on average three months after the policy commencement date.

Forward interest rates are those estimated to be anticipated over future years by the Commonwealth bond market as it stood at 30 June 2023.

The interest rates are obtained by fitting a curve to the **30 June 2023** Commonwealth Government Bond yield curve, to derive the one year forward rates of interest, which are then independent of the cash flows of a particular portfolio of risks.

We have extended our projections of the discount rate and assume a long term rate of 4.5% after year 50. We have assumed a smooth progression from the observed market rate at year 16 to the long term rate at year 50.

The wage inflation assumptions we have adopted are higher than those used for the previous valuation. The short term inflation rates for the next four years are based future wage price inflation from NT

Treasury's mid-year report 2023/24 forecasts. We have assumed that Average Weekly Earnings (AWE) forecasts are aligned to the WPI forecasts in the short term and have therefore used these forecasts for the next four years.

We have assumed that the long term gap will take longer to achieve and have adopted a long term inflation rate of 3.5% after 30 years. We have assumed a smooth progression of wage inflation increasing from 3.1% in 2027 to a rate of 3.5% in 2053.

Past wage inflation

Past wage inflation for bringing past payments and case estimates into current values is taken from ABS Cat 6302.0 Average Weekly Earnings for Northern Territory (persons full-time adult ordinary time earnings), as shown below:

			Claims escalation factors		
Year to 30-Jun	Mid Quarter AWE	End Quarter AWE	% Change p.a.	For payments	For case estimates
2009	1,150.9	1,158.6		1.566	1.537
2010	1,224.2	1,235.3	6.6%	1.492	1.442
2011	1,289.3	1,311.1	6.1%	1.401	1.358
2012	1,408.6	1,410.8	7.6%	1.292	1.262
2013	1,449.3	1,449.2	2.7%	1.247	1.229
2014	1,417.2	1,426.3	-1.6%	1.239	1.249
2015	1,513.5	1,523.3	6.8%	1.211	1.169
2016	1,569.7	1,586.6	4.2%	1.146	1.123
2017	1,616.5	1,624.3	2.4%	1.098	1.097
2018	1,668.5	1,662.2	2.3%	1.078	1.072
2019	1,690.3	1,689.0	1.6%	1.070	1.055
2020	1,701.6	1,702.1	0.8%	1.053	1.046
2021	1,695.2	1,696.0	-0.4%	1.048	1.050
2022	1,710.3	1,718.7	1.3%	1.046	1.036
2023	1,775.9	1,781.1	3.6%	1.017	1.000

B.2 Superimposed inflation

A realistic level of superimposed inflation is allowed for in the outstanding claim reserves and projected break-even premium rate.

We have analysed the superimposed inflation separately for each payment type, and for each valuation method.

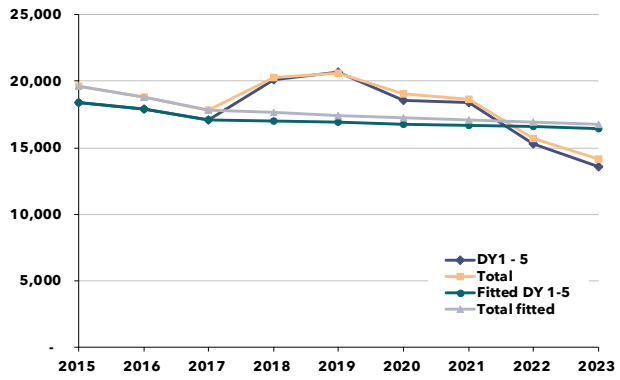
The recent trends in real growth, i.e., superimposed inflation, are shown in the charts below.

We have used the following averaging periods to analyse the superimposed inflation:

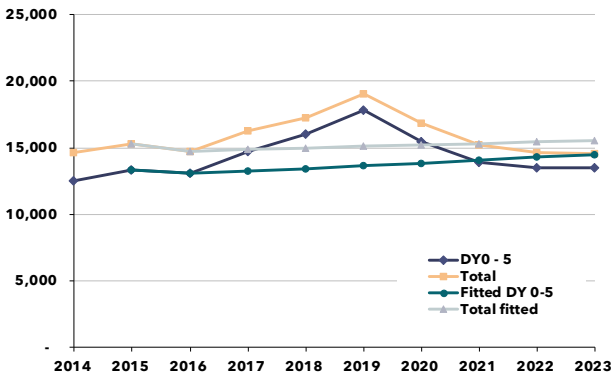
Superimposed Inflation - averaging periods (years)	Weekly Benefits	Medical And Hospital	Allied Health, Vocational Rehabilitation, Non-Compensation Payments (Other), Death	Other Goods And Services	Legals	Redemptions And Non-Economic Lump Sum
PPAC/PPCF	7	6	7	6	5	6
PPCI	8	6	6	5	7	7

Weekly benefits

PPAC

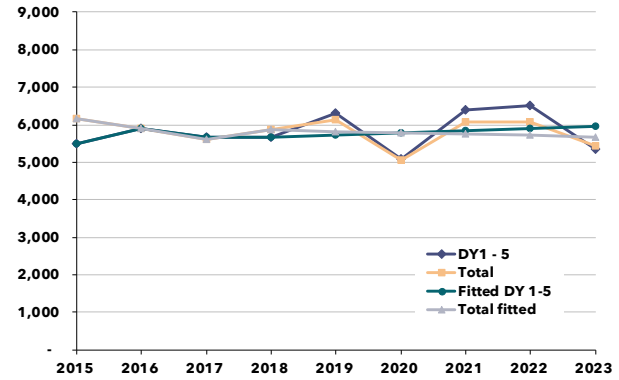


PPCI

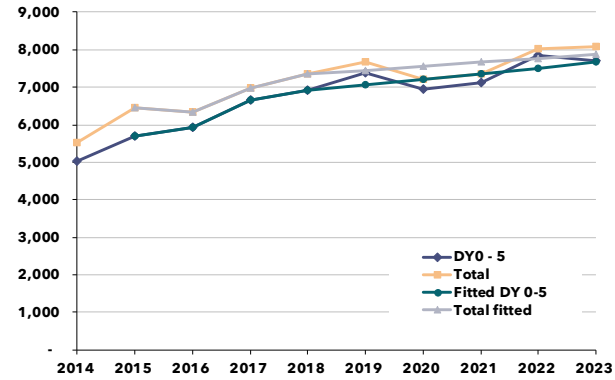


Medical and hospital

PPAC

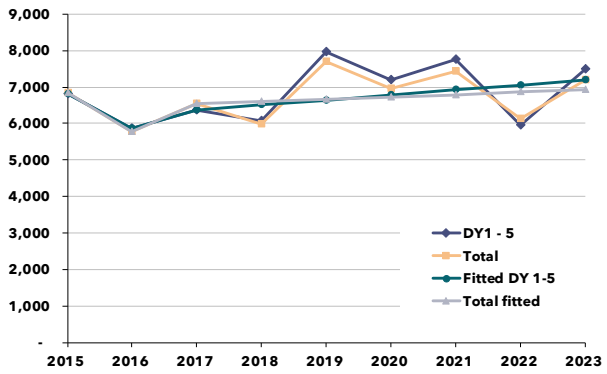


PPCI-

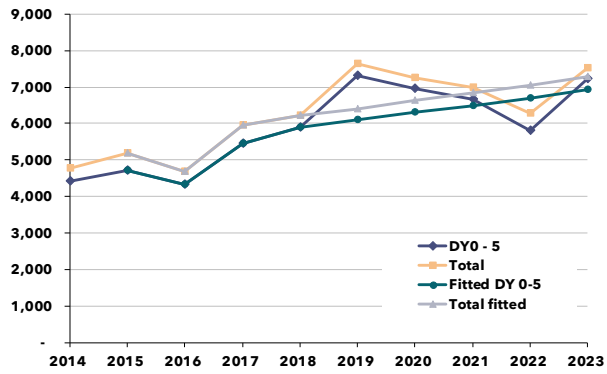


Allied health, vocational rehabilitation, non-compensation other and death

PPAC

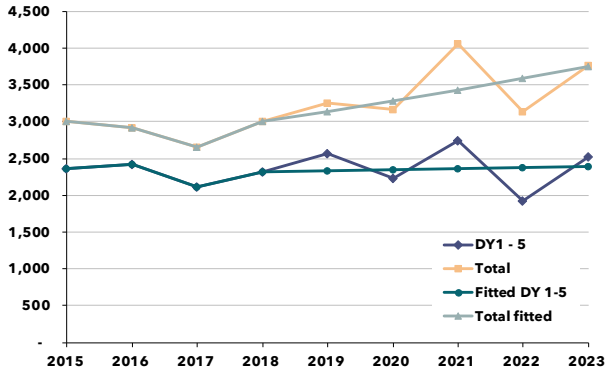


PPCI

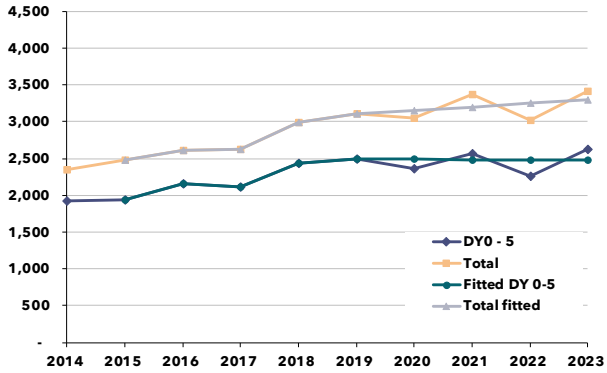


Other goods and services

PPAC

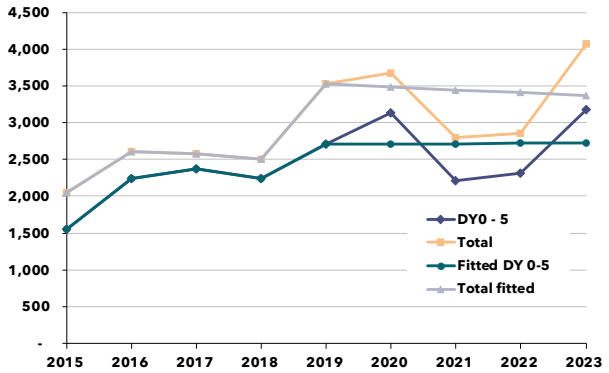


PPCI

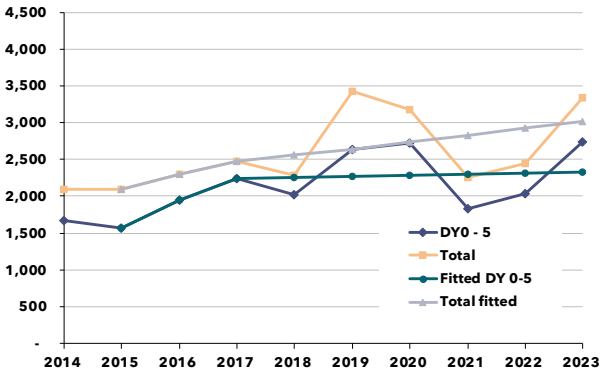


Legal

PPCF

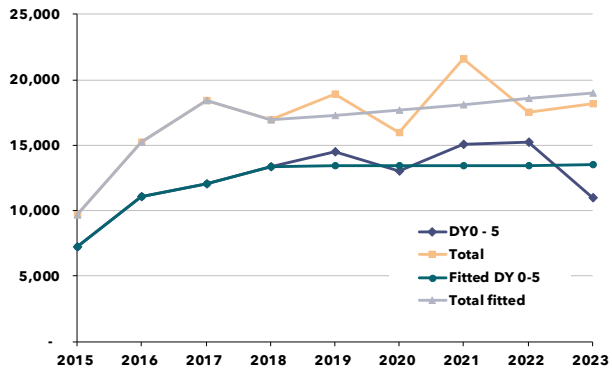


PPCI

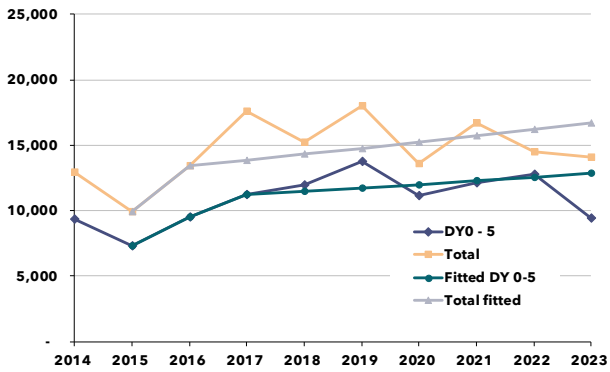


Redemptions and non-economic lump sum

PPCF



PPCI



This analysis of trends leads to the following assumed rates of superimposed inflation.

Superimposed Inflation	Weekly Benefits	Medical And Hospital	Allied Health, Vocactional Rehabilitation, Non-Compsenation Payments (Other), Death	Other Goods And Services	Legals	Redemptions And Non-Economic Lump Sum	Total
PPAC/PPCF	0.0%	1.0%	2.0%	0.0%	1.5%	1.0%	
PPCI	1.5%	2.0%	3.0%	0.0%	3.0%	2.0%	
30 Jun 23	0.5%	1.3%	2.3%	0.0%	2.1%	1.4%	1.2%
30 Jun 22	1.2%	2.2%	3.6%	0.1%	1.7%	0.3%	1.0%

Note a minimum of zero is applied to the superimposed inflation, hence classes with a revealed negative superimposed inflation have had a value of 0% applied.

In total, our superimposed inflation estimate of 1.2% p.a. is a 0.2% increase on the 1.0% p.a. adopted for the previous valuation. Our estimate of superimposed inflation is higher compared to the previous valuation for Legals and Redemptions and other Non-Economic Lump sum payment types and lower for the other payment types.

We calculate the total as a weighted average across the payment groups, weighted by the total outstanding claims estimate.

B.3 Expenses

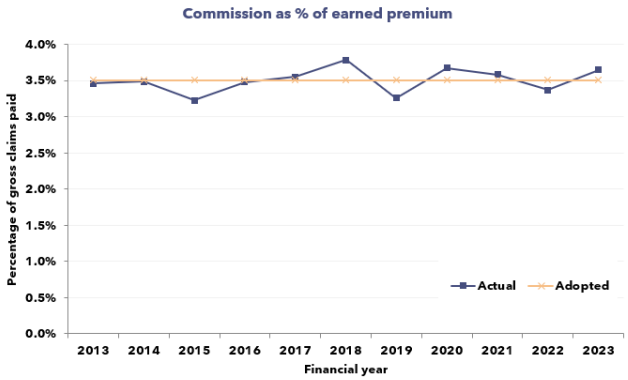
Claims handling expenses

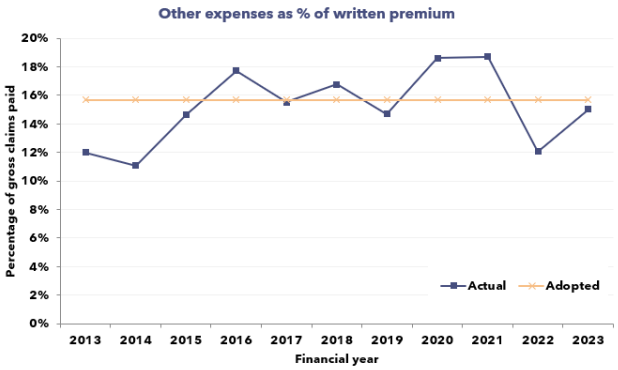
We have reviewed the allowances made for claims handling expenses in the insurers' and self-insurers' returns provided to us to set the following claims handling expense assumptions for use in the outstanding claims liability:

- 6% of projected future claim payments for insurers, as per previous valuation
- 6% of projected future claim payments for self-insurers, as per previous valuation.

Commission and other expenses (including claims handling expenses)

The historical commission rate as a percentage of earned premium and other expenses as a percentage of written premium are:





The commission as a percentage of earned premium was 3.5% in 2013 and has been relatively stable since. Other expenses have been volatile over the period shown, increasing significantly in 2015 and 2016. We do not know what has driven the increase in other expenses since 2015 but it could be due to increases in IT costs and reallocation of expenses amongst the lines of insurance. Other expenses for 2023 have increased by 72% compared to 2022, which combined with a 38% increase in premium, has caused the other expense ratio to increase for 2023. We understand that the low expenses for 2022 was due to Liability Adequacy Test (LAT) adjustments for one insurer. This year we worked with insurers to understand all the components included in other expenses and considered which of these should be included in the estimation of the break-even premium for the following year. We got insurers to split out the LAT movement from the other expenses so going forward LAT movement will no longer be included

For the break-even premium we have used an average of the last two years to set the commission rate, as a proportion of earned premium, and average of four years for the other expense rate, as a proportion of written premium, as follows:

($000s)	Underwriting year					
	2023	2022	2021	2020	2019	Adopted
Gross written premiums (a)	201,987	146,845	145,986	125,789	142,690	
Earned premiums (a)	177,073	146,226	131,769	122,529	144,321	
Commission (a)	6,465	4,927	4,727	4,501	4,701	
Other expenses (a)	30,377	17,701	27,327	23,402	20,986	
Commission rate (b)	3.7%	3.4%	3.6%	3.7%	3.3%	3.5%
Expense rate (c)	15.0%	12.1%	18.7%	18.6%	14.7%	15.9%

Notes: (a), (b), (c), (d) actual values taken from Consolidated Form A

(e) = (c) / (b)

(f) = (d) / (a)

The adopted rate is used in our calculation of the break-even premium rate for the next financial year. To determine the adequacy of past rates we have used the actual dollar values of commission and other expenses paid.

Compared to the previous valuation, the adopted commission rate has remained the same at 3.5%, and the adopted other expense rate has increased from 15.4% to 15.9%. To moderate the volatility from the

other expense rate in prior years we adopted a longer averaging period of four years which lead to the increase.

The actual 2023 financial year commission is slightly higher, while other expenses rates are lower than the level that we had adopted in our projections last year.

In total, the commission and other expense rate make up 19.4% of the break-even premium rate, which is higher than the 18.8% adopted for the 30 June 2022 valuation.

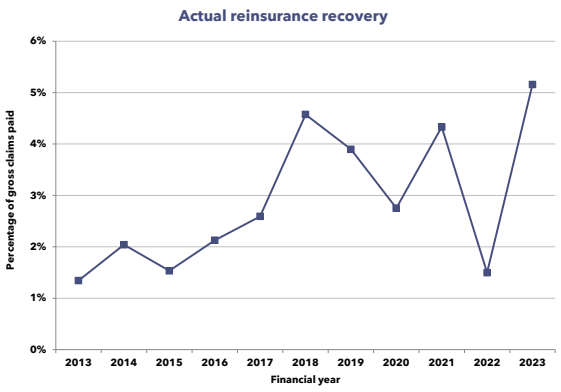
B.4 Reinsurance

We have used the additional information provided by insurers to allow for reinsurance recoveries on large claims, which are expected to exceed the retention limit. This is equivalent to 5% of of the insurer's gross outstanding claims liability excluding expenses, which is lower than our previous valuation. We compared the reinsurance recoveries based on the large claims with insurers' total reinsurance recoveries and they were similar, though slightly higher, so we did not feel it was necessary to allow for any further reinsurance recoveries on the smaller claims.

We reviewed the self-insurers' reports and noted that either they have not allowed for any reinsurance recoveries, or they note that reinsurance recoveries are minimal. Therefore, we have not allowed for any reinsurance recoveries for self-insurers.

The following table and chart show the historical reinsurance recoveries received by approved insurers. The reinsurance recovery rate is defined as a proportion of the gross claims paid. This is provided for information purposes and was not used for this valuation.

Financial year	Gross claims paid (a) ($000s)	Reinsurance recoveries (b) ($000s)	Reinsurance recovery (c) (%)
2012	82,569	1,630	2.0%
2013	89,191	1,199	1.3%
2014	91,942	1,876	2.0%
2015	91,120	1,398	1.5%
2016	102,891	2,189	2.1%
2017	122,608	3,178	2.6%
2018	121,156	5,542	4.6%
2019	134,064	5,223	3.9%
2020	109,825	3,024	2.8%
2021	107,284	4,647	4.3%
2022	96,016	1,439	1.5%
2023	101,724	5,245	5.2%



Notes: (a), (b) actual values taken from Consolidated Form A

(c) = (b) / (a)

B.5 GST

No explicit allowance has been made for GST net of ITC and/or DAM as our adopted bases rely on data, which includes GST net of ITC and/or DAM. The 10% GST on the workers' compensation premium itself (which employers will generally be able to recover via an input tax credit) is not included in our analysis or the recommended premium rates.

B.6 Legislation changes

B.6.1 2015 legislative amendments

The 2015 legislative amendments were set out in two parts.

The first amendment bill, Workers' Rehabilitation and Compensation Legislation Amendment Bill 2015, passed in March 2015 and came into effect 1 July 2015. The benefit changes that were part of this bill include:

- Presumptive legislation for firefighters and volunteers to make it easier for firefighters and volunteer firefighters to claim workers' compensation if they are diagnosed with one of the 12 cancers listed in the legislation schedule
- A change in the definition of work to align with the PAYG definition used by the Australian Taxation Office (ATO)
- Increased period of compensation for older workers by extending weekly benefits from 26 weeks to 104 weeks for workers aged 67 years and older
- Five year cap on weekly benefits for claimants with a permanent impairment of less than 15% and all medical and other costs are limited to one additional year
- Increase in death and funeral benefits to 364 times the average weekly earnings
- Compensation will not be provided for stroke or heart attacks that are not caused by work
- Capping the calculation for normal weekly earnings. During the first 26 weeks when a worker is unable to work, their compensation payments are paid at their normal weekly earnings. After 26 weeks, compensation payments are paid at 75% of their normal weekly earnings. There is now a cap on the calculation of a worker's normal weekly earnings after 26 weeks to 250% of the ABS average weekly earnings.

The second amendment bill, the Return to Work Legislation Amendment Bill 2015, was passed in August 2015 and came into effect on 1 October 2015. This bill included:

- Payment of up to 1.5 times Average Weekly Earnings for counselling and support
- While a claim is deferred, the employer is required to make weekly payments of compensation and, in the case of claims for mental stress, engage in rehabilitation
- Formal notice be provided to the worker of any pending step down or cancellation 14 days prior to it taking effect
- A mediator may recommend workers receive legal advice paid for by the employer.
- Negotiated settlements. There will be provision for the finalisation of the claim by the payment of a lump sum through negotiated settlement. The legislation requires a qualifying period of 104 weeks before a negotiated settlement
- Settlement of disputed claims. There is provision to allow for the settlement of disputed claims for compensation (whether disputed on a question of fact or law or both) and settlement of contested applications to the Work Health Court
- Exclusion of journey claims to and from work. Journeys that are considered to be in the course of employment are not excluded.

ASSUMPTIONS

We costed the following changes in our report titled Actuarial costing of Northern Territory workers compensation scheme changes dated 11 September 2014:

- Increased period of compensation for older workers by extending weekly benefits from 26 weeks to 104 weeks for workers aged 67 years and older
- Five year cap on weekly benefits for claimants with a permanent impairment of less than 15% and all medical and other costs are limited to one additional year.

We also provided commentary on some other proposed scheme changes including:

- Increase in death and funeral benefits
- New settlement regime
- Exclusion of journey claims
- Weekly benefit cap of 250% of normal weekly earnings.

The capping of weekly benefits and other benefits to five and six years respectively for claimants with less than 15% PI was estimated to reduce the payments by 54% in development year six and seven onwards for the two categories respectively. The reductions have been applied on this basis to the relevant payment types. This has been allowed for in our calculations of the outstanding claims liabilities as at 30 June 2023 for the 2015/16 to 2022/23 accident years and the future costs for the 2023/24 accident year. There is no allowance for the 2015 legislative changes in the outstanding claims liability as at 30 June 2023 for accident years before 2015/16.

The 2020/21 financial year was the first year where weekly benefits for claims with less than 15% whole person impairment (WPI) will cease for those who have reached 260 weeks of wages and had an accident date after 1 July 2015. There we now have three financial years of data to review the impact. We had undertaken some high level analysis of the payments data to understand what impact the 2015 legislation amendment has had at the previous valuation.

The tables below show the number of claims that have had weekly benefit payments by accident year and development year and as a percentage of all claims. The accident years below the line are post the 2015 legislative amendments.

Claims with a Weekly benefit payment										
Accident Year	**DY0**	**DY1**	**DY2**	**DY3**	**DY4**	**DY5**	**DY6**	**DY7**	**DY8**	**DY9**
2010	1,117	545	145	70	50	32	22	14	11	6
2011	1,163	530	126	66	42	18	15	8	9	6
2012	1,073	551	135	67	29	23	16	11	10	11
2013	1,099	571	170	77	45	25	15	10	10	8
2014	992	612	151	78	34	22	13	8	8	5
2015	969	540	159	73	35	24	17	12	10	
2016	933	577	151	62	27	15	9	6		
2017	946	550	165	62	27	15	9			
2018	883	634	183	82	49	22				
2019	889	448	132	58	22					
2020	748	422	106	46						
2021	717	473	100							
2022	651	448								
2023	658									

Claims with Weekly Benefit payment as a percentage of total claims										
Accident Year	DY0	DY1	DY2	DY3	DY4	DY5	DY6	DY7	DY8	DY9
2010	44.3%	21.6%	5.8%	2.8%	2.0%	1.3%	0.9%	0.6%	0.4%	0.2%
2011	42.9%	19.6%	4.7%	2.4%	1.6%	0.7%	0.6%	0.3%	0.3%	0.2%
2012	40.6%	20.8%	5.1%	2.5%	1.1%	0.9%	0.6%	0.4%	0.4%	0.4%
2013	39.2%	20.3%	6.1%	2.7%	1.6%	0.9%	0.5%	0.4%	0.4%	0.3%
2014	35.7%	22.0%	5.4%	2.8%	1.2%	0.8%	0.5%	0.3%	0.3%	0.2%
2015	36.7%	20.5%	6.0%	2.8%	1.3%	0.9%	0.6%	0.5%	0.4%	
2016	37.3%	23.0%	6.0%	2.5%	1.1%	0.6%	0.4%	0.2%		
2017	39.8%	23.1%	6.9%	2.6%	1.1%	0.6%	0.4%			
2018	37.0%	26.6%	7.7%	3.4%	2.1%	0.9%				
2019	41.6%	20.9%	6.2%	2.7%	1.0%					
2020	41.4%	23.4%	5.9%	2.5%						
2021	37.8%	24.9%	5.3%							
2022	35.6%	24.5%								
2023	39.2%									

For the 2016 and 2017 accident years around 23% of claims have a weekly benefit payment in development year one (DY1) which is higher than 19% to 22% of claims for 2015 and earlier accident years. However, the percentage of claims with a weekly benefit payment in DY3 to DY6 for the 2016 and 2017 accident years is lower than most years prior to 2016. The lower percentage of claims in DY3 and DY4 may reflect some of the high settlement activity seen for 2016 and 2017 (see below). The lower percentage in DY5 and DY6 may reflect the capping of weekly benefits to five years for claimants with a whole person impairment of less than 15%. 2018 has a higher percentage of claims with weekly benefit payments than all other years, except for DY0. While 2019 and 2020 have a higher percentage of claims with weekly benefit payments in DY0 they are similar to 2016 and 2017 in DY1 to DY3. 2021 has started off with a lower percentage of claims with weekly benefit payments in DY0 than 2019 and 2020 but similar to 2016 to 2017, followed by a higher percentage in DY1 than most prior years but then lower than all prior years in DY2.

The tables below show the number of claims that have had redemption commutation lump sum payments by accident year and development year and as a percentage of all claims. The accident years below the line are post the 2015 legislative amendments.

Claims with a Redemption Commutation Lumpsum payment											
Accident Year	DY0	DY1	DY2	DY3	DY4	DY5	DY6	DY7	DY8	DY9	Total
2010	7	29	32	22	18	9	10	4	5	3	139
2011	13	48	43	34	4	10	15	1	3	0	171
2012	16	76	31	20	11	11	5	2	3	5	180
2013	34	73	42	34	17	9	14	7	5	0	235
2014	16	55	46	43	19	15	11	1	0	1	207
2015	20	61	61	32	26	6	7	4	6		223
2016	20	62	59	37	19	10	9	4			220
2017	18	67	67	43	18	10	0				223
2018	28	99	75	48	37	13					300
2019	24	71	55	36	13						199
2020	19	72	48	31							170
2021	26	64	48								138
2022	29	69									98
2023	25										25

Cumulative Claims with a Redemption Commutation Lumpsum payment as a percentage of total claims										
Accident Year	DY0	DY1	DY2	DY3	DY4	DY5	DY6	DY7	DY8	DY9
2010	0.3%	1.4%	2.7%	3.6%	4.3%	4.6%	5.0%	5.2%	5.4%	5.5%
2011	0.5%	2.3%	3.8%	5.1%	5.2%	5.6%	6.2%	6.2%	6.3%	6.3%
2012	0.6%	3.5%	4.7%	5.4%	5.8%	6.2%	6.4%	6.5%	6.6%	6.8%
2013	1.2%	3.8%	5.3%	6.5%	7.1%	7.4%	7.9%	8.2%	8.4%	8.4%
2014	0.6%	2.6%	4.2%	5.8%	6.4%	7.0%	7.4%	7.4%	7.4%	7.5%
2015	0.8%	3.1%	5.4%	6.6%	7.6%	7.8%	8.1%	8.2%	8.4%	
2016	0.8%	3.3%	5.6%	7.1%	7.9%	8.3%	8.6%	8.8%		
2017	0.8%	3.6%	6.4%	8.2%	9.0%	9.4%	9.4%			
2018	1.2%	5.3%	8.5%	10.5%	12.0%	12.6%				
2019	1.1%	4.4%	7.0%	8.7%	9.3%					
2020	1.1%	5.0%	7.7%	9.4%						
2021	1.4%	4.7%	7.3%							
2022	1.6%	5.4%								
2023	1.5%									

The percentage of claims with a redemption commutation lump sum payment has a general increasing trend, with each year from 2016 to 2022 higher than the previous years, except 2019 to 2021 are lower than 2018 but higher than all prior years. 2023 is slightly lower than 2022 but higher than all prior years. This could be influenced by a number of aspects though including the 2015 legislation changes, the economic circumstances and the general mix in claim numbers.

The average redemption payments in 30 June 2023 values is shown in the table below.

Average Redemption Commutation Lumpsum payments in 30 June 2023 values ($000)											
Accident Year	DY0	DY1	DY2	DY3	DY4	DY5	DY6	DY7	DY8	DY9	Total
2010	45	136	191	173	216	239	198	481	347	337	193
2011	54	89	110	198	137	357	307	501	208	0	154
2012	23	78	84	263	277	348	246	530	121	122	135
2013	29	69	136	269	242	152	304	208	181	0	140
2014	35	59	122	170	245	265	166	611	0	559	138
2015	26	37	140	289	249	217	827	415	425		172
2016	30	53	134	178	174	187	112	1,014			130
2017	50	68	104	171	130	193	0				108
2018	42	70	99	165	244	150					115
2019	32	51	121	130	113						87
2020	30	66	87	126							79
2021	32	48	78								55
2022	40	58									53
2023	54										54

The average redemption payments in DY0 to DY2 are similar for 2016 to 2022 to 2015 and earlier, however the average payment for DY3 onwards is noticeably lower in 2016 onwards compared to 2015 and earlier, except for DY7 of 2016 which is due to a very large payment for one claim. Therefore, the 2015 legislation may be reducing the average redemption payment as some of these settlements may relate to claimants with a whole person impairment of less than 15%.

The tables below show the number of claims that have had impairment non-economic lump sum payments (i.e. permanent impairment payments) by accident year and development year and as a percentage of all claims. The accident years below the line are post the 2015 legislative amendments.

ASSUMPTIONS

Claims with an Impairment Non-Economic Lumpsum payment											
Accident Year	DY0	DY1	DY2	DY3	DY4	DY5	DY6	DY7	DY8	DY9	Total
2010	3	23	30	7	10	4	2	3	0	1	83
2011	3	11	25	12	7	4	2	1	1	0	66
2012	2	16	29	18	4	1	2	3	1	0	76
2013	1	12	31	17	5	3	2	2	2	0	75
2014	2	21	16	20	13	5	1	0	2	0	80
2015	7	11	24	19	8	5	1	4	1		80
2016	2	20	27	23	4	4	2	3			85
2017	1	14	25	17	7	2	0				66
2018	0	11	40	23	14	9					97
2019	0	16	21	25	8						70
2020	0	10	25	9							44
2021	0	15	29								44
2022	4	14									18
2023	4										4

Cumulative Claims with an Impairment Non-Economic Lumpsum payment as a percentage of total claims										
Accident Year	DY0	DY1	DY2	DY3	DY4	DY5	DY6	DY7	DY8	DY9
2010	0.1%	1.0%	2.2%	2.5%	2.9%	3.1%	3.1%	3.3%	3.3%	3.3%
2011	0.1%	0.5%	1.4%	1.9%	2.1%	2.3%	2.4%	2.4%	2.4%	2.4%
2012	0.1%	0.7%	1.8%	2.5%	2.6%	2.6%	2.7%	2.8%	2.9%	2.9%
2013	0.0%	0.5%	1.6%	2.2%	2.4%	2.5%	2.5%	2.6%	2.7%	2.7%
2014	0.1%	0.8%	1.4%	2.1%	2.6%	2.8%	2.8%	2.8%	2.9%	2.9%
2015	0.3%	0.7%	1.6%	2.3%	2.6%	2.8%	2.8%	3.0%	3.0%	
2016	0.1%	0.9%	2.0%	2.9%	3.0%	3.2%	3.3%	3.4%		
2017	0.0%	0.6%	1.7%	2.4%	2.7%	2.8%	2.8%			
2018	0.0%	0.5%	2.1%	3.1%	3.7%	4.1%				
2019	0.0%	0.7%	1.7%	2.9%	3.3%					
2020	0.0%	0.6%	1.9%	2.4%						
2021	0.0%	0.8%	2.3%							
2022	0.2%	1.0%								
2023	0.2%									

Overall, the impairment non-economic lump sum payment appears to be paid earlier than historically but there does not appear to be a change in the cumulative percentage of claims receiving an impairment payment in later development years. The cumulative percentage of claims that have received an impairment non-economic lump sum payment at DY2 for the accident years after the legislation change (2016 onwards) is generally higher at 1.7% to 2.0% than accident years prior to the legislation change (2015 and earlier) at 1.4% to 1.8% except for the high 2010 accident year. However, the cumulative percentage at DY5 for 2017 is similar to 2014 and 2015. 2016 has a higher percentage of claims with an impairment non-economic lump sum payment than 2015, though not markedly different compared to the variability experience prior to 2015. As with other payment types 2018 is tracking higher than all other years. We do not have data on the number of claims that apply for a permanent impairment assessment and are rejected.

The average impairment non-economic lump sum payments in 30 June 2023 values is shown in the table below.

Average Impairment non-economic lump sum payments in 30 June 2023 values ($000)											
Accident Year	DY0	DY1	DY2	DY3	DY4	DY5	DY6	DY7	DY8	DY9	Total
2010	35	15	27	17	29	30	29	39	0	108	25
2011	62	18	25	33	49	10	46	58	162	0	32
2012	7	24	30	33	61	80	60	48	15	0	32
2013	3	23	24	44	41	28	47	300	78	0	39
2014	4	17	24	43	46	49	62	0	7	0	31
2015	15	25	16	29	83	79	7	104	97		36
2016	7	20	29	47	39	82	7	80			36
2017	7	9	33	35	70	26	0				32
2018	0	31	40	44	71	48					45
2019	0	27	22	47	14						31
2020	0	38	37	46							39
2021	0	19	26								23
2022	38	21									24
2023	12										12

The average impairment non-economic lump sum payments are similar for 2016 to 2022 to 2015 and earlier, except for 2018 which is noticeably higher.

As the scheme changes were broader than covered by our report the actual impact could be different to estimated.

B.6.2 2020 legislative amendments

The Return to Work Legislation Amendment Act 2020 reverses a number of changes made to the legislation in 2015 as well as adding some new changes. The Act came into effect from 29 July 2020.

The following changes were made to the Act which are not retrospective:

- Changes to the definition of worker
- Inclusion of journey claims
- Removal of cap of 250% of average weekly earnings after 26 weeks
- Amendments regarding refusal to pay for medical treatment
- Changes to the ability to recover overpayments
- Changes to return to work plans not requiring an accredited vocational rehabilitation specialist
- Changes to wording in the act to clarify aspects of the settlement arrangements and to meet the minimum benchmarks of the National Injury Insurance Scheme (NIIS), by not allowing settlement of payments for lifetime care and medical payments for catastrophic injuries.

There were also changes to the Return to Work Regulations 2020 including:

- Post-traumatic stress disorder has become a deemed disease for first responders. Most first responders are government employees so are covered by the government self-insurance scheme and not part of this review. It will impact St John Ambulance officers who obtain a premium from insurers.
- Four new deemed diseases are included for firefighters. As firefighters are government employees, they are covered by the government self-insurance scheme and not part of this review.

We were not asked to cost any of the 2020 legislative amendments.

Some of these changes are a reversal of the 2015 legislative amendments which weren't costed at the time as they were considered minimal. The more material changes will mainly affect the government self-insurance claims which are out of scope for the report. The changes to catastrophic injuries may have an impact if the settlements were previously significantly less than the actual lifetime cost.

As most changes are not retrospective, they will only impact the 2021 to 2023 accident years for the 30 June 2023 outstanding claims liability and the 2023/24 projections. We have not made any specific allowance for the 2020 legislative amendments for the 30 June 2023 outstanding claims valuation and 2023/24 projections.

B.7 Wage and premium development factors

Earned wages and premium develop over time as wages are initially estimated at the beginning of the underwriting year and are updated with actual wages when known and reported to the insurers. Earned premium develops based on the development of earned wages but also based on adjustments for burner policies as the claim experience emerges.

The table below shows the development factors we have applied to earned wages. These are based on five year averages of the development of wages, with development year 3 assuming no more development. The development factor is higher for DY0 but lower than last year for DY1 and DY2.

Earned wages development factors			
Development year	**2023**	**2022**	**2021**
0	1.037	1.024	1.019
1	1.004	1.007	1.005
2	0.996	0.998	1.001
3	1.000	1.000	1.000

The table below shows the development factors applied to earned premium, including the earned but not yet raised (EBNYR) premium. These are based on five year averages of the development of premium. The development factor is slightly lower than last year for DY0 to DY2.

Earned premium development factors			
Development year	**2023**	**2022**	**2021**
0	1.004	1.014	1.016
1	0.996	1.002	1.003
2	0.994	0.999	1.002
3	1.000	0.991	1.001

C Insurer outstanding claim valuation

C.1 Data used in the valuation

C.1.1 Number of claims reported

Financial Year	Number of claims reported (a) for development year: 0	1	2	3	4	5	6	7	8	9	10 onwards	Total
2014	2,385	320	15	6	4	0	0	1	1	1	4	2,737
2015	2,335	335	21	4	2	3	2	0	0	0	2	2,704
2016	2,257	280	16	7	1	1	2	0	0	0	0	2,564
2017	2,141	244	18	7	3	0	2	0	0	0	2	2,417
2018	2,151	249	19	9	2	3	0	0	0	1	1	2,435
2019	1,982	235	17	11	4	2	0	1	2	0	1	2,255
2020	1,634	194	19	6	3	0	1	2	2	0	6	1,867
2021	1,661	190	12	13	3	3	0	0	0	2	3	1,887
2022	1,617	229	12	6	8	0	0	1	0	1	2	1,876
2023	1,586	218	14	7	3	2	1	1	0	1	3	1,836

Note: From summary of Form B returns up to 30 June 2023

C.1.2 Cumulative claims reported

Financial Year	Cumulative number of claims reported (a) for development year: 0	1	2	3	4	5	6	7	8	9	10
2014	2,385	2,743	2,619	2,658	2,520	2,615	2,730	2,472	2,714	2,752	2,578
2015	2,335	2,720	2,764	2,623	2,660	2,523	2,617	2,730	2,472	2,714	2,754
2016	2,257	2,615	2,736	2,771	2,624	2,661	2,525	2,617	2,730	2,472	2,714
2017	2,141	2,501	2,633	2,743	2,774	2,624	2,663	2,525	2,617	2,730	2,474
2018	2,151	2,390	2,520	2,642	2,745	2,777	2,624	2,663	2,525	2,618	2,731
2019	1,982	2,386	2,407	2,531	2,646	2,747	2,777	2,625	2,665	2,525	2,619
2020	1,634	2,176	2,405	2,413	2,534	2,646	2,748	2,779	2,627	2,665	2,531
2021	1,661	1,824	2,188	2,418	2,416	2,537	2,646	2,748	2,779	2,629	2,668
2022	1,617	1,890	1,836	2,194	2,426	2,416	2,537	2,647	2,748	2,780	2,631
2023	1,586	1,835	1,904	1,843	2,197	2,428	2,417	2,538	2,647	2,749	2,783

Note: Cumulative claim reports from table above

C.1.3 Active claims

Financial Year	Active claims (a) at the end of development year: 0	1	2	3	4	5	6	7	8	9	10 onwards	Total
2014	931	293	100	52	45	27	28	25	11	13	72	1,597
2015	854	279	145	57	37	35	25	23	19	10	59	1,543
2016	1,007	288	140	81	48	24	27	19	19	14	63	1,730
2017	912	281	152	68	52	26	14	22	16	16	65	1,624
2018	1,011	286	125	74	42	39	19	12	17	12	66	1,703
2019	821	332	106	59	43	25	25	16	11	14	65	1,517
2020	639	253	164	41	34	30	17	18	15	10	77	1,298
2021	738	218	117	100	22	24	23	17	11	13	78	1,361
2022	797	237	99	57	56	11	15	19	17	13	84	1,405
2023	854	307	118	55	32	37	8	9	13	15	92	1,540

Note: From summary of Form B returns up to 30 June 2023

C.1.4 Claim payments

Financial Year	Claim payments (a) for development year ($000): 0	1	2	3	4	5	6	7	8	9	10 onwards	Total
2014	19,227	24,217	9,748	10,448	6,810	5,760	3,421	4,773	1,958	476	4,914	91,751
2015	19,189	24,957	15,515	9,393	3,877	4,145	3,315	2,818	1,704	1,546	5,852	92,311
2016	21,206	24,629	15,439	14,449	5,196	4,979	2,900	2,253	4,170	2,208	4,781	102,211
2017	23,602	30,360	20,541	12,743	7,258	5,034	5,829	2,782	1,629	2,446	9,690	121,914
2018	26,881	31,663	19,224	15,753	8,432	3,474	2,472	1,126	2,207	1,180	8,226	120,638
2019	24,960	43,705	20,499	11,979	9,568	5,423	5,713	2,154	1,360	1,413	7,905	134,678
2020	22,623	26,194	24,007	12,819	5,934	4,537	2,868	2,942	1,292	815	5,948	109,979
2021	21,031	25,691	15,749	16,160	5,264	3,665	7,436	1,067	1,707	1,383	8,053	107,208
2022	22,113	24,108	12,334	9,449	13,933	2,789	1,987	3,460	409	642	5,349	96,574
2023	23,925	27,845	12,515	8,330	3,392	4,609	566	5,844	4,014	753	9,339	101,130

Note: Data extracted from the WIMS system up to 30 June 2023

C.1.5 Case estimates

Financial Year	Case estimates (a) for development year ($000): 0	1	2	3	4	5	6	7	8	9	10 onwards	Total
2014	41,909	30,987	25,229	11,474	13,213	7,832	18,376	10,870	3,624	4,128	33,758	201,399
2015	49,148	25,816	20,696	16,394	10,023	7,330	9,704	15,151	8,164	2,212	32,364	197,002
2016	43,796	39,453	16,396	15,291	13,782	7,456	6,243	9,415	12,568	4,855	32,279	201,533
2017	46,664	33,128	33,218	12,093	12,531	7,468	4,042	5,589	8,461	10,207	31,103	204,503
2018	66,003	34,783	23,594	20,199	7,580	10,483	5,693	3,782	4,443	8,451	31,866	216,879
2019	44,442	46,620	18,260	13,031	13,916	3,887	5,096	4,886	2,488	3,427	32,511	188,564
2020	41,104	29,022	28,647	8,094	7,660	10,196	2,887	2,906	3,223	2,072	32,089	167,900
2021	44,005	27,918	15,439	22,538	6,032	7,514	7,266	2,744	3,424	4,336	28,885	170,102
2022	45,915	26,632	19,155	6,668	10,381	3,750	6,766	6,537	2,743	2,846	30,875	162,270
2023	56,251	38,417	21,702	14,888	5,154	9,030	4,579	5,935	4,472	2,155	27,463	190,044

Note: From summary of Form B returns up to 30 June 2023. Case estimates were provided for the first time at 30 June 2014

C.2 Actual and projected claims experience during 30 June 2023

This section compares the actual experience over the 2023 financial year with the expected experience based on the previous scheme valuation as at 30 June 2023.

C.2.1 Number of claims reported

Accident year ended 30 June	Number of claims reported Combined total Actual (a)	Projected (b)	Actual / expected (c)
2013 and earlier	3	3	109%
2014	1	1	120%
2015	0	1	0%
2016	1	1	133%
2017	1	0	552%
2018	2	1	135%
2019	3	3	87%
2020	7	7	103%
2021	14	13	106%
2022	218	188	116%
Total	**250**	**218**	**115%**

Notes: (a) Extracted from the WIMS database to 30 June 2023

(b) Derived using the reporting rates in Appendix C3.1 of our previous scheme report dated 21 March 2023

(c) = (a) / (b) x 100

C.2.2 Proportion of claims finalised

Accident year ended 30 June	Proportion of claims finalised (a) during 2022/23 Actual	Projected (b)	Actual / expected (c)
2013 and earlier	8%	21%	38%
2014	17%	21%	79%
2015	32%	20%	156%
2016	44%	20%	223%
2017	33%	32%	105%
2018	36%	36%	101%
2019	47%	46%	102%
2020	48%	57%	85%
2021	53%	55%	96%
2022	70%	75%	94%
Total	**58.5%**	**62.1%**	**94%**

Note: (a) Defined as:

$$\frac{\text{number of claims finalised during the year}}{\text{number outstanding at beginning of year + number reported during the year}}$$

(b) According to claim finalised per handled rate in Appendix C3.1 of previous scheme report dated 21 March 2023. Total is weighted average using the current year's actual number of claims handled by occurrence year as the weights

C.2.3 Claim payments

Accident year ended 30 June	Amount of claim payments during 2022/23 Combined total ($000) Actual	Projected (b)	Actual / expected (c)
2013 and earlier	9,339	7,434	126%
2014	753	1,017	74%
2015	4,014	3,169	127%
2016	5,844	4,389	133%
2017	566	2,063	27%
2018	4,609	6,129	75%
2019	3,392	7,634	44%
2020	8,330	11,212	74%
2021	12,515	15,656	80%
2022	27,845	28,282	98%
Total	**77,205**	**86,985**	**89%**

Notes: (a) Extracted from the WIMS database to 30 June 2023

(b) From previous scheme report dated 21 March 2023, in 30 June 2023 values

(c) = (a) / (b) x 100.

C.2.4 Case estimate development

Accident year ended 30 June	Case estimate development during 2022/23 Actual	Projected (a)	Ratio of actual to projected number reported %
2013 and earlier	1.058	1.120	94%
2014	1.027	1.239	83%
2015	1.262	1.156	109%
2016	1.694	1.266	134%
2017	1.326	1.241	107%
2018	1.275	1.182	108%
2019	1.245	1.132	110%
2020	1.177	1.168	101%
2021	1.247	1.140	109%
2022	1.402	1.297	108%
Total	**1.262**	**1.196**	**106%**

Notes: (a) according to PCE model in Appendix C4 of our previous scheme report dated 21 March 2023

(b) according to estimates adopted in Appendix D4 of our previous scheme report dated 21 March 2023.

C.3 Analysis and projection models

C.3.1 All payment types

Claim notification pattern

Financial Year	Chain ladder ratio (a) for development year: 1	2	3	4	5	6	7	8	9	10 onwards
2014	1.132	1.006	1.002	1.002	1.000	1.000	1.000	1.000	1.000	1.002
2015	1.140	1.008	1.002	1.001	1.001	1.001	1.000	1.000	1.000	1.001
2016	1.120	1.006	1.003	1.000	1.000	1.001	1.000	1.000	1.000	1.000
2017	1.108	1.007	1.003	1.001	1.000	1.001	1.000	1.000	1.000	1.001
2018	1.116	1.008	1.003	1.001	1.001	1.000	1.000	1.000	1.000	1.000
2019	1.109	1.007	1.004	1.002	1.001	1.000	1.000	1.001	1.000	1.000
2020	1.098	1.008	1.002	1.001	1.000	1.000	1.001	1.001	1.000	1.002
2021	1.116	1.006	1.005	1.001	1.001	1.000	1.000	1.000	1.001	1.001
2022	1.138	1.007	1.003	1.003	1.000	1.000	1.000	1.000	1.000	1.001
2023	1.135	1.007	1.004	1.001	1.001	1.000	1.000	1.000	1.000	1.001
Adopted (b)	**1.136**	**1.007**	**1.004**	**1.002**	**1.001**	**1.000**	**1.000**	**1.000**	**1.000**	**1.001**

Notes: (a) Using cumulative claim report numbers from data

(b) Adopted for 30 June 2023 valuation

Numbers of claims incurred

Financial Year	Number of claims Reported to 30 June 2023 (a)	IBNR at 30 June 2023 (b)	Incurred (c)
2014	2,749	3	2,752
2015	2,647	4	2,651
2016	2,538	4	2,542
2017	2,417	5	2,422
2018	2,428	5	2,433
2019	2,197	6	2,203
2020	1,843	8	1,851
2021	1,904	16	1,920
2022	1,835	28	1,863
2023	1,586	244	1,830

Notes: (a) from number reported in Appendix C1.1

(b) from pattern in chain ladder ratio table above

(c) = (a) + (b)

Claim finalised per handled rate

Financial Year	Finalisation rate (a) for development year: 0	1	2	3	4	5	6	7	8	9	10 onwards
2014	0.610	0.748	0.593	0.552	0.408	0.386	0.243	0.074	0.313	0.133	0.258
2015	0.634	0.780	0.538	0.452	0.315	0.271	0.138	0.179	0.240	0.091	0.322
2016	0.554	0.746	0.525	0.467	0.172	0.368	0.270	0.240	0.174	0.263	0.087
2017	0.574	0.775	0.503	0.537	0.381	0.458	0.462	0.185	0.158	0.158	0.177
2018	0.530	0.754	0.583	0.540	0.400	0.291	0.269	0.143	0.227	0.294	0.195
2019	0.586	0.734	0.650	0.566	0.449	0.432	0.359	0.200	0.214	0.176	0.177
2020	0.609	0.751	0.533	0.634	0.452	0.302	0.346	0.333	0.167	0.091	0.094
2021	0.556	0.737	0.558	0.435	0.500	0.351	0.233	0.000	0.389	0.235	0.133
2022	0.507	0.755	0.570	0.537	0.481	0.500	0.375	0.208	0.000	-0.083	0.097
2023	0.462	0.698	0.530	0.481	0.467	0.362	0.333	0.438	0.316	0.167	0.080
Adopted (b)	**0.509**	**0.734**	**0.552**	**0.523**	**0.469**	**0.377**	**0.328**	**0.240**	**0.221**	**0.228**	**0.114**

Notes: (a) Defined as: Number of claims finalised / number of claims handled

(b) Adopted for 30 June 2023 valuation

C.3.2 Weekly benefits

Claim payments

Financial Year	Claim payments (a) for development year ($000): 0	1	2	3	4	5	6	7	8	9	10 onwards	Total
2014	8,077	10,392	3,401	2,381	2,126	1,102	1,214	679	359	390	1,850	31,971
2015	8,216	11,084	5,568	2,512	1,283	1,155	573	805	923	332	1,657	34,109
2016	8,743	10,679	5,402	3,190	1,339	815	615	474	523	679	1,582	34,041
2017	9,854	13,164	5,918	2,682	1,987	649	520	558	442	423	1,733	37,931
2018	9,548	14,918	5,975	3,767	1,708	999	613	296	326	391	1,522	40,064
2019	9,971	19,099	6,699	2,511	680	702	677	511	305	211	1,387	42,754
2020	8,123	10,780	8,360	2,545	1,181	1,179	548	442	397	541	1,490	35,586
2021	7,261	8,959	4,832	4,122	1,331	610	755	332	434	325	1,449	30,410
2022	7,743	8,783	3,540	2,486	2,135	551	328	598	218	437	1,378	28,197
2023	8,297	9,616	3,698	1,501	852	1,027	359	419	459	133	1,517	27,879

Notes: (a) Data extracted from the WIMS system up to 30 June 2023. DY10+ using the list of historical transaction by payment type.

Average real payment per active claim

Financial Year	Weekly Benefits PPAC (a) for development year: 1	2	3	4	5	6	7	8	9	10 onwards
2014	15,261	18,249	26,833	36,597	31,053	40,674	32,368	29,624	34,516	24,653
2015	14,412	23,003	30,409	29,876	31,084	25,704	34,809	44,675	36,560	23,602
2016	14,330	22,186	25,214	26,910	25,243	20,120	21,747	26,040	40,979	26,277
2017	14,359	22,571	21,039	26,948	14,861	23,804	22,704	25,537	24,483	24,723
2018	17,640	22,931	26,723	27,085	20,714	25,423	22,835	15,967	26,343	20,267
2019	20,221	25,073	21,498	9,842	17,887	18,594	28,812	27,199	13,307	19,034
2020	13,822	26,506	25,275	21,071	28,873	23,083	18,615	26,119	51,764	19,854
2021	14,687	20,005	26,329	34,009	18,794	26,355	20,454	25,285	22,722	17,444
2022	12,449	16,988	22,225	22,332	26,209	14,317	27,207	13,420	41,567	15,845
2023	12,268	15,867	15,413	15,192	18,656	33,212	28,402	24,576	7,974	15,901
Adopted (b)	**13,255**	**17,691**	**22,887**	**22,321**	**21,407**	**22,341**	**24,367**	**23,104**	**24,356**	**17,489**

Notes: (a) In 30 June 2023 values

(b) Adopted for 30 June 2023 valuation. No special allowance was made for the 2018 AY.

Average real payment per claim incurred

Financial Year	Weekly Benefits PPCI (a) for development year: 0	1	2	3	4	5	6	7	8	9	10 onwards	Total
2014	3,638	4,628	1,602	1,106	1,041	522	551	340	164	175	889	14,657
2015	3,752	4,875	2,422	1,156	582	553	265	357	451	148	728	15,290
2016	3,941	4,617	2,249	1,314	583	350	278	208	219	315	668	14,741
2017	4,469	5,687	2,452	1,070	784	271	214	242	185	170	769	16,316
2018	4,231	6,642	2,534	1,532	669	387	251	120	139	161	601	17,268
2019	4,845	8,401	2,961	1,057	275	273	261	208	122	89	567	19,058
2020	4,619	5,151	3,616	1,106	489	468	210	167	159	213	620	16,818
2021	3,962	5,069	2,297	1,774	576	251	298	126	164	130	569	15,216
2022	4,347	4,786	2,000	1,180	918	238	135	236	83	164	548	14,636
2023	4,610	5,248	1,959	824	393	429	151	168	176	49	554	14,561
Adopted (b)	**4,512**	**5,218**	**2,096**	**1,052**	**528**	**332**	**213**	**181**	**140**	**129**	**571**	**14,974**

Notes: (a) In 30 June 2023 values

(b) Adopted for 30 June 2023 valuation. We increased these factors by 35% for the 2018 AY to reflect the significantly higher experience to date for this year.

Estimates from models

Weekly Benefits Accident Year	Estimated outstanding claims claims at 30 June 2023 ($000s) (a) PPAC	PPCI	Adopted	Weighting PPAC	PPCI
2014 & earlier	16,825	9,244	9,244	0%	100%
2015	2,357	1,999	2,357	100%	0%
2016	1,774	2,305	1,774	100%	0%
2017	1,642	2,669	1,642	100%	0%
2018	4,287	4,378	4,314	70%	30%
2019	3,249	3,717	3,483	50%	50%
2020	4,263	4,153	4,153	0%	100%
2021	7,264	6,405	6,835	50%	50%
2022	14,388	10,243	13,144	70%	30%
2023	24,713	19,829	24,713	100%	0%
Total	**80,760**	**64,942**	**71,658**		

Notes: (a) From models described above, in 30 June 2023 values and includes superimposed inflation but excludes the 2015 legislative amendments

C.3.3 Medical and hospital

Claim payments

Financial Year	Claim payments (a) for development year ($000): 0	1	2	3	4	5	6	7	8	9	10 onwards	Total
2014	5,387	3,814	764	627	315	213	121	186	39	18	668	12,152
2015	6,205	4,215	1,174	357	436	255	149	174	297	35	1,051	14,347
2016	6,462	4,969	1,228	423	200	253	152	126	96	51	457	14,417
2017	7,117	5,338	1,786	450	349	162	233	64	108	28	315	15,948
2018	8,065	4,679	1,501	801	364	372	122	110	114	25	742	16,895
2019	7,041	6,584	1,549	429	350	169	307	54	67	30	225	16,806
2020	6,915	3,760	1,785	435	188	419	50	180	58	76	326	14,194
2021	6,493	4,101	1,177	883	396	354	202	50	43	54	265	14,020
2022	6,907	5,158	1,226	332	631	86	151	107	14	3	196	14,811
2023	7,554	4,475	1,302	496	131	131	33	335	35	19	542	15,052

Note: Data extracted from the WIMS system up to 30 June 2023. DY10+ using the list of historical transaction by payment type.

Average real payment per active claim

Financial Year	Medical And Hospital PPAC (a) for development year: 1	2	3	4	5	6	7	8	9	10 onwards
2014	5,602	4,101	7,060	5,422	6,005	4,053	8,856	3,228	1,572	8,907
2015	5,481	4,849	4,324	10,143	6,858	6,668	7,533	14,381	3,838	14,962
2016	6,668	5,044	3,343	4,018	7,823	4,972	5,770	4,780	3,075	7,595
2017	5,822	6,813	3,531	4,730	3,708	10,642	2,593	6,249	1,603	4,486
2018	5,532	5,760	5,684	5,775	7,722	5,048	8,479	5,573	1,712	9,877
2019	6,971	5,796	3,673	5,060	4,301	8,436	3,061	5,947	1,874	3,094
2020	4,821	5,661	4,323	3,359	10,257	2,099	7,594	3,847	7,272	4,346
2021	6,724	4,875	5,641	10,125	10,901	7,052	3,078	2,528	3,784	3,195
2022	7,312	5,886	2,972	6,596	4,083	6,566	4,853	863	319	2,254
2023	5,710	5,584	5,093	2,334	2,372	3,019	22,679	1,849	1,143	5,685
Adopted (b)	**6,650**	**5,563**	**4,410**	**4,911**	**6,167**	**6,076**	**7,598**	**2,783**	**2,698**	**3,748**

Notes: (a) In 30 June 2023 values

(b) Adopted for 30 June 2023 valuation. No special allowance was made for the 2018 AY.

Average real payment per claim incurred

Financial Year	Medical And Hospital PPCI (a) for development year: 0	1	2	3	4	5	6	7	8	9	10 onwards	Total
2014	2,426	1,699	360	291	154	101	55	93	18	8	321	5,526
2015	2,834	1,854	511	164	198	122	69	77	145	16	462	6,451
2016	2,913	2,148	511	174	87	108	69	55	40	24	193	6,323
2017	3,227	2,306	740	180	138	68	96	28	45	11	140	6,978
2018	3,574	2,083	637	326	143	144	50	44	48	10	293	7,353
2019	3,421	2,896	684	181	141	66	118	22	27	13	92	7,661
2020	3,932	1,797	772	189	78	166	19	68	23	30	136	7,211
2021	3,543	2,321	560	380	171	146	80	19	16	22	104	7,361
2022	3,878	2,811	693	158	271	37	62	42	5	1	78	8,036
2023	4,197	2,442	689	272	60	55	14	134	13	7	198	8,082
Adopted (b)	**3,984**	**2,604**	**681**	**235**	**145**	**95**	**60**	**56**	**17**	**14**	**122**	**8,014**

Notes: (a) In 30 June 2023 values

(b) Adopted for 30 June 2023 valuation. We increased these factors by 25% for the 2018 AY to reflect the significantly higher experience to date for this year.

Estimates from models

Medical And Hospital Accident Year	Estimated outstanding claims claims at 30 June 2023 ($000s) (a) PPAC	PPCI	Adopted	Weighting PPAC	PPCI
2014 & earlier	3,892	3,602	3,602	0%	100%
2015	512	425	512	100%	0%
2016	372	458	372	100%	0%
2017	370	582	370	100%	0%
2018	994	846	949	70%	30%
2019	797	895	846	50%	50%
2020	1,024	1,037	1,037	0%	100%
2021	1,629	1,552	1,591	50%	50%
2022	3,754	2,816	3,473	70%	30%
2023	9,234	7,632	9,234	100%	0%
Total	**22,577**	**19,845**	**21,984**		

Notes: (a) From models described above, in 30 June 2023 values and includes superimposed inflation but excludes the 2015 legislative amendments

C.3.4 Allied health, vocational rehabilitation, non-compensation (other) and death

Claim payments

Financial Year	Claim payments (a) for development year ($000): 0	1	2	3	4	5	6	7	8	9	10 onwards	Total
2014	3,361	3,607	1,477	703	351	214	243	66	62	40	365	10,490
2015	2,555	4,054	2,100	996	446	386	139	191	167	117	434	11,583
2016	2,991	3,903	1,880	797	243	194	141	96	115	118	308	10,785
2017	3,561	5,263	2,349	884	388	197	482	166	65	122	373	13,851
2018	5,270	4,863	1,866	922	414	201	150	68	77	52	396	14,279
2019	4,761	7,087	2,778	759	591	236	158	138	125	61	320	17,015
2020	4,791	5,186	2,649	863	266	347	99	102	130	65	315	14,813
2021	4,268	4,834	1,646	1,294	390	205	262	63	70	88	369	13,488
2022	3,826	4,496	1,564	344	291	92	143	207	29	25	785	11,803
2023	4,164	6,011	1,842	683	322	337	72	168	125	14	373	14,111

Note: Data extracted from the WIMS system up to 30 June 2023. DY10+ using the list of historical transaction by payment type.

Average real payment per active claim

Financial Year	Allied Health, Vocational Rehabilitation, Non-Compensation Payments (Other), Death PPAC (a) for dev year: 1	2	3	4	5	6	7	8	9	10 onwards
2014	5,297	7,924	7,926	6,046	6,033	8,148	3,136	5,145	3,519	4,861
2015	5,272	8,674	12,055	10,380	10,385	6,213	8,266	8,064	12,836	6,175
2016	5,237	7,721	6,299	4,877	6,006	4,608	4,402	5,710	7,132	5,117
2017	5,741	8,959	6,939	5,256	4,517	22,082	6,737	3,775	7,053	5,314
2018	5,750	7,162	6,543	6,571	4,173	6,235	5,204	3,750	3,534	5,269
2019	7,503	10,398	6,503	8,542	6,017	4,323	7,802	11,178	3,838	4,397
2020	6,649	8,400	8,572	4,741	8,490	4,158	4,312	8,581	6,226	4,204
2021	7,925	6,813	8,263	9,954	6,321	9,152	3,890	4,069	6,177	4,441
2022	6,373	7,505	3,079	3,041	4,391	6,248	9,395	1,806	2,372	9,027
2023	7,668	7,901	7,013	5,741	6,118	6,657	11,406	6,698	833	3,914
Adopted (b)	**7,125**	**7,866**	**7,633**	**7,130**	**6,456**	**5,971**	**7,165**	**6,130**	**3,755**	**4,226**

Notes: (a) In 30 June 2023 values

(b) Adopted for 30 June 2023 valuation. No special allowance was made for the 2018 AY.

Average real payment per claim incurred

Financial Year	Allied Health, Vocational Rehabilitation, Non-Compensation Payments (Other), Death PPCI (a) for development year: 0	1	2	3	4	5	6	7	8	9	10 onwards	Total
2014	1,514	1,606	696	327	172	101	110	33	28	18	175	4,781
2015	1,167	1,783	913	458	202	185	64	85	81	52	191	5,182
2016	1,348	1,687	783	328	106	83	64	42	48	55	130	4,674
2017	1,615	2,274	973	353	153	82	199	72	27	49	165	5,963
2018	2,335	2,165	792	375	162	78	62	27	33	22	156	6,207
2019	2,313	3,117	1,228	320	238	92	61	56	50	26	131	7,632
2020	2,724	2,478	1,146	375	110	138	38	39	52	26	131	7,256
2021	2,329	2,735	782	557	169	85	104	24	26	35	145	6,990
2022	2,148	2,450	884	164	125	40	59	82	11	9	312	6,283
2023	2,314	3,280	975	375	149	141	30	67	48	5	136	7,521
Adopted (b)	**2,363**	**2,723**	**958**	**408**	**168**	**99**	**59**	**53**	**37**	**20**	**136**	**7,024**

Notes: (a) In 30 June 2023 values

(b) Adopted for 30 June 2023 valuation. We increased these factors by 53% for the 2018 AY to reflect the significantly higher experience to date for this year.

Estimates from models

Allied Health, Vocational Rehabilitation, Non-Compensation Payments (Other), Death					
Accident Year	Estimated outstanding claims claims at 30 June 2023 ($000s) (a) PPAC	PPCI	Adopted	Weighting PPAC	PPCI
2014 & earlier	4,753	3,665	3,665	0%	100%
2015	637	513	637	100%	0%
2016	491	602	491	100%	0%
2017	467	719	467	100%	0%
2018	1,189	1,358	1,239	70%	30%
2019	934	1,047	990	50%	50%
2020	1,283	1,219	1,219	0%	100%
2021	2,309	2,095	2,202	50%	50%
2022	5,357	3,903	4,921	70%	30%
2023	11,224	9,002	11,224	100%	0%
Total	**28,644**	**24,123**	**27,057**		

Notes: (a) From models described above, in 30 June 2023 values and includes superimposed inflation but excludes the 2015 legislative amendments

C.3.5 Other goods and services

Claim payments

Financial Year	Claim payments (a) for development year ($000): 0	1	2	3	4	5	6	7	8	9	10 onwards	Total
2014	1,740	1,385	431	348	150	187	156	-14	13	19	701	5,116
2015	1,547	1,684	452	202	316	120	155	240	136	14	651	5,517
2016	2,051	1,969	484	234	95	115	80	93	147	90	630	5,987
2017	1,848	1,839	823	194	112	43	88	48	148	56	827	6,027
2018	2,432	1,759	769	380	119	122	44	57	37	291	949	6,958
2019	1,837	2,302	831	274	224	53	135	62	75	33	1,177	7,002
2020	1,875	1,277	762	403	143	305	64	161	67	74	1,309	6,439
2021	1,850	1,983	413	306	136	128	426	49	73	44	1,460	6,869
2022	1,951	1,574	307	100	151	63	85	319	44	130	1,308	6,032
2023	1,723	2,013	762	181	82	59	61	439	145	13	1,448	6,926

Note: Data extracted from the WIMS system up to 30 June 2023. DY10+ using the list of historical transaction by payment type.

Average real payment per active claim

Financial Year	Other Goods And Services PPAC (a) for development year: 1	2	3	4	5	6	7	8	9	10 onwards
2014	2,034	2,311	3,917	2,581	5,271	5,233	-659	1,059	1,722	9,343
2015	2,189	1,868	2,450	7,361	3,222	6,935	10,386	6,562	1,545	9,275
2016	2,643	1,987	1,846	1,914	3,554	2,621	4,246	7,313	5,414	10,466
2017	2,006	3,138	1,523	1,520	992	4,048	1,936	8,573	3,251	11,803
2018	2,080	2,951	2,695	1,889	2,540	1,828	4,355	1,800	19,594	12,636
2019	2,437	3,110	2,343	3,245	1,361	3,697	3,468	6,698	2,059	16,151
2020	1,637	2,416	4,004	2,545	7,468	2,693	6,759	4,376	7,103	17,446
2021	3,251	1,711	1,955	3,480	3,935	14,891	3,031	4,248	3,076	17,584
2022	2,231	1,474	895	1,576	2,984	3,706	14,505	2,716	12,387	15,035
2023	2,568	3,268	1,862	1,466	1,074	5,639	29,742	7,744	802	15,181
Adopted (b)	**2,391**	**2,429**	**2,172**	**2,339**	**3,238**	**3,661**	**10,769**	**5,124**	**4,354**	**16,223**

Notes: (a) In 30 June 2023 values

(b) Adopted for 30 June 2023 valuation. No special allowance was made for the 2018 AY.

Average real payment per claim incurred

Financial Year	Other Goods And Services PPCI (a) for development year: 0	1	2	3	4	5	6	7	8	9	10 onwards	Total
2014	783	617	203	162	73	89	71	-7	6	9	337	2,342
2015	706	741	197	93	143	57	71	106	66	6	286	2,474
2016	924	851	201	96	41	49	36	41	62	42	266	2,610
2017	838	795	341	77	44	18	36	21	62	23	367	2,623
2018	1,078	783	326	155	47	47	18	23	16	120	375	2,987
2019	892	1,013	367	115	91	21	52	25	30	14	481	3,101
2020	1,066	610	330	175	59	121	24	61	27	29	545	3,047
2021	1,009	1,122	196	132	59	53	169	19	27	18	573	3,377
2022	1,095	858	174	48	65	27	35	126	17	49	520	3,012
2023	957	1,098	403	100	38	25	26	175	56	5	529	3,412
Adopted (b)	**1,032**	**908**	**297**	**116**	**63**	**50**	**35**	**80**	**31**	**23**	**530**	**3,164**

Notes: (a) In 30 June 2023 values

(b) Adopted for 30 June 2023 valuation. No special allowance was made for the 2018 AY.

Estimates from models

Other Goods And Services					
Accident Year	Estimated outstanding claims at 30 June 2023 ($000s) (a) PPAC	PPCI	Adopted	Weighting PPAC	PPCI
2014 & earlier	15,608	10,448	10,448	0%	100%
2015	1,949	1,362	1,949	100%	0%
2016	1,360	1,485	1,360	100%	0%
2017	1,212	1,608	1,212	100%	0%
2018	2,435	1,699	2,215	70%	30%
2019	1,607	1,648	1,628	50%	50%
2020	1,594	1,502	1,502	0%	100%
2021	1,932	1,780	1,856	50%	50%
2022	3,289	2,281	2,987	70%	30%
2023	5,127	3,902	5,127	100%	0%
Total	**36,112**	**27,715**	**30,282**		

Notes: (a) From models described above, in 30 June 2023 values and includes superimposed inflation but excludes the 2015 legislative amendments

C.3.6 Legal payments

Claim payments

Financial Year	Claim payments (a) for development year ($000): 0	1	2	3	4	5	6	7	8	9	10 onwards	Total
2014	200	738	873	638	499	640	282	220	80	9	300	4,481
2015	143	946	881	499	661	354	345	349	114	182	187	4,661
2016	420	899	1,217	1,156	445	451	134	498	66	13	100	5,400
2017	388	1,419	1,562	1,086	483	420	231	88	35	69	134	5,916
2018	481	1,099	1,065	795	954	430	292	77	47	79	162	5,481
2019	637	1,883	1,357	823	1,061	312	368	263	54	31	1,242	8,032
2020	371	1,311	1,881	1,017	877	671	317	106	281	58	392	7,281
2021	365	932	901	1,015	306	265	258	-10	72	290	480	4,874
2022	436	899	986	596	980	100	300	246	13	56	395	5,005
2023	791	1,393	773	1,254	337	677	41	257	649	23	605	6,801

Note: Data extracted from the WIMS system up to 30 June 2023. DY10+ using the list of historical transaction by payment type.

Average real payment per claim finalised

Financial Year	Legals PPCF (a) for development year: 0	1	2	3	4	5	6	7	8	9	10 onwards
2014	171	1,050	7,414	12,356	19,966	46,695	38,844	136,233	19,895	5,394	14,898
2015	117	1,161	6,309	12,859	47,039	32,998	104,306	84,517	23,003	220,100	8,094
2016	385	1,218	8,999	18,663	51,029	36,914	15,351	95,033	19,023	2,998	19,144
2017	347	1,607	11,139	15,101	16,574	20,971	21,169	19,398	12,801	25,411	10,522
2018	455	1,355	6,563	9,859	36,733	28,977	44,989	41,401	10,039	17,048	10,935
2019	587	2,206	7,374	11,443	32,453	17,551	28,153	70,431	19,318	11,157	94,992
2020	392	1,811	10,590	15,073	32,965	54,367	37,022	12,441	98,563	61,474	51,561
2021	414	1,597	6,377	13,803	14,578	21,388	38,681	0	10,840	75,856	41,895
2022	556	1,289	7,870	9,454	19,706	9,505	34,816	51,449	0	0	45,905
2023	1,098	2,001	5,912	24,999	12,254	32,777	10,429	37,362	110,028	7,860	76,883
Adopted (b)	**586**	**1,677**	**6,919**	**14,366**	**22,712**	**27,418**	**31,469**	**36,064**	**58,051**	**48,029**	**52,525**

Notes: (a) In 30 June 2023 values

(b) Adopted for 30 June 2023 valuation. No special allowance was made for the 2018 AY.

Average real payment per claim incurred

Financial Year	Legals PPCI (a) for development year: 0	1	2	3	4	5	6	7	8	9	10 onwards	Total
2014	90	329	411	296	245	303	128	110	37	4	144	2,098
2015	65	416	383	230	300	169	159	155	56	81	82	2,097
2016	189	389	507	476	194	194	61	218	28	6	42	2,303
2017	176	613	647	433	191	175	95	38	15	28	60	2,471
2018	213	489	452	324	374	167	120	31	20	33	64	2,285
2019	309	828	600	347	429	121	142	107	22	13	508	3,425
2020	211	626	814	442	363	267	121	40	112	23	163	3,182
2021	199	527	428	437	132	109	102	-4	27	115	188	2,262
2022	245	490	557	283	421	43	123	97	5	21	157	2,442
2023	439	760	410	689	156	283	17	103	249	9	221	3,335
Adopted (b)	**281**	**601**	**502**	**429**	**306**	**165**	**103**	**67**	**82**	**36**	**183**	**2,755**

Notes: (a) In 30 June 2023 values

(b) Adopted for 30 June 2023 valuation. We increased these factors by 48% for the 2018 AY to reflect the significantly higher experience to date for this year.

Estimates from models

Legals Accident Year	Estimated outstanding claims at 30 June 2023 ($000s) (a) PPCF	PPCI	Adopted	Weighting PPCF	PPCI
2014 & earlier	6,493	3,682	3,682	0%	100%
2015	968	689	968	100%	0%
2016	785	891	785	100%	0%
2017	729	1,039	729	100%	0%
2018	2,055	1,965	2,028	70%	30%
2019	1,624	1,606	1,615	50%	50%
2020	2,170	1,963	1,963	0%	100%
2021	3,318	2,931	3,124	50%	50%
2022	5,170	3,876	4,782	70%	30%
2023	6,227	5,036	6,227	100%	0%
Total	**29,539**	**23,679**	**25,903**		

Notes: (a) From models described above, in 30 June 2023 values and includes superimposed inflation but excludes the 2015 legislative amendments

C.3.7 Redemptions and non-economic lump sum

Claim payments

Financial Year	Claim payments (a) for development year ($000): 0	1	2	3	4	5	6	7	8	9	10 onwards	Total
2014	461	4,280	2,801	5,751	3,368	3,403	1,405	3,637	1,405	0	1,029	27,541
2015	522	2,974	5,342	4,826	736	1,875	1,955	1,059	68	866	1,872	22,094
2016	539	2,209	5,228	8,649	2,875	3,152	1,779	967	3,224	1,257	1,703	31,581
2017	833	3,337	8,103	7,447	3,939	3,561	4,275	1,859	831	1,747	6,309	42,240
2018	1,085	4,346	8,048	9,088	4,873	1,349	1,251	518	1,608	341	4,454	36,961
2019	712	6,749	7,284	7,183	6,661	3,951	4,068	1,125	734	1,047	3,553	43,068
2020	548	3,881	8,570	7,556	3,280	1,615	1,791	1,950	359	0	2,116	31,665
2021	795	4,882	6,780	8,541	2,705	2,103	5,533	583	1,014	581	4,030	37,547
2022	1,251	3,198	4,711	5,590	9,747	1,897	980	1,984	91	-9	1,287	30,726
2023	1,397	4,336	4,139	4,215	1,668	2,377	0	4,226	2,601	550	4,853	30,362

Note: Data extracted from the WIMS system up to 30 June 2023 DY10+ using the list of historical transaction by payment type.

Average real payment per claim finalised

Financial Year	Redemptions And Non-Economic Lump Sum PPCF (a) for development year: 0	1	2	3	4	5	6	7	8	9	10 onwards
2014	393	6,091	23,782	111,379	134,677	248,097	193,460	2,253,753	348,286	0	51,033
2015	427	3,648	38,262	124,304	52,382	174,583	591,556	256,310	13,815	1,048,817	80,925
2016	494	2,992	38,655	139,595	329,427	258,003	203,826	184,638	923,546	288,034	325,317
2017	745	3,779	57,794	103,536	135,216	177,805	391,264	408,407	304,153	639,569	494,964
2018	1,026	5,356	49,590	112,644	187,674	90,922	192,771	279,460	346,838	73,560	300,214
2019	657	7,904	39,579	99,860	203,719	222,589	310,990	301,023	261,883	373,635	271,636
2020	580	5,361	48,243	112,025	123,301	130,809	209,480	228,121	125,882	0	278,381
2021	902	8,370	47,991	116,193	128,804	169,448	827,941	0	151,709	152,220	351,810
2022	1,596	4,583	37,622	88,600	196,085	180,385	113,968	415,048	0	0	149,566
2023	1,940	6,228	31,641	84,042	60,578	115,113	0	613,806	440,729	186,310	616,791
Adopted (b)	**1,058**	**6,152**	**41,530**	**101,531**	**133,739**	**150,418**	**305,408**	**305,408**	**305,408**	**305,408**	**305,408**

Notes: (a) In 30 June 2023 values

(b) Adopted for 30 June 2023 valuation. We increased these factors by 2% for the 2018 AY to reflect the higher experience to date for this year.

Average real payment per claim incurred

Financial Year	Redemptions And Non-Economic Lump Sum PPCI (a) for development year: 0	1	2	3	4	5	6	7	8	9	10 onwards	Total
2014	208	1,906	1,320	2,672	1,650	1,610	638	1,822	642	0	495	12,961
2015	239	1,308	2,324	2,221	334	897	903	469	34	386	823	9,937
2016	243	955	2,177	3,561	1,252	1,354	805	423	1,353	582	719	13,425
2017	378	1,442	3,358	2,972	1,555	1,487	1,760	807	348	703	2,801	17,609
2018	481	1,935	3,413	3,697	1,909	523	513	209	685	140	1,759	15,265
2019	346	2,969	3,219	3,024	2,690	1,537	1,564	458	294	443	1,452	17,996
2020	312	1,854	3,707	3,284	1,358	642	685	738	144	0	880	13,603
2021	434	2,762	3,224	3,677	1,170	866	2,186	222	382	231	1,582	16,736
2022	702	1,742	2,662	2,654	4,190	819	403	783	34	-3	512	14,499
2023	776	2,366	2,192	2,315	770	993	0	1,690	998	203	1,773	14,077
Adopted (b)	**507**	**2,251**	**3,052**	**3,032**	**1,539**	**979**	**993**	**766**	**368**	**171**	**1,249**	**14,908**

Notes: (a) In 30 June 2023 values

(b) Adopted for 30 June 2023 valuation. We increased these factors by 47% for the 2018 AY to reflect the higher experience to date for this year.

Estimates from models

Redemptions And Non-Economic Lump Sum					
	Estimated outstanding claims				
Accident	claims at 30 June 2023 ($000s) (a)			Weighting	
Year	PPCF	PPCI	Adopted	PPCF	PPCI
2014 & earlier	36,300	33,570	33,570	0%	100%
2015	5,506	4,370	5,506	100%	0%
2016	4,384	5,211	4,384	100%	0%
2017	4,279	6,929	4,279	100%	0%
2018	13,967	13,991	13,974	70%	30%
2019	10,240	10,968	10,604	50%	50%
2020	13,395	12,267	12,267	0%	100%
2021	21,252	18,841	20,046	50%	50%
2022	32,538	24,379	30,090	70%	30%
2023	35,538	28,566	35,538	100%	0%
Total	**177,399**	**159,093**	**170,259**		

Notes: (a) From models described above, in 30 June 2023 values and includes superimposed inflation but excludes the 2015 legislative amendments

C.3.8 Combined PCE method

Case estimates development factors

Financial	Case estimate development factors (a) for development year:									
Year	0	1	2	3	4	5	6	7	8	9	10 onwards
2015		1.154	1.111	0.969	1.146	0.824	1.570	0.921	0.855	0.985	0.950
2016		1.262	1.196	1.394	1.118	1.201	1.205	1.159	1.066	0.836	1.032
2017		1.417	1.332	1.481	1.265	0.887	1.295	1.311	1.047	0.984	1.073
2018		1.396	1.267	1.061	1.298	1.090	1.070	1.188	1.165	1.113	0.950
2019		1.357	1.105	1.051	1.151	1.219	1.023	1.222	1.007	1.077	0.989
2020		1.236	1.124	1.141	1.038	1.053	1.473	1.142	0.919	1.153	1.051
2021		1.307	1.077	1.354	1.399	1.464	1.445	1.324	1.771	1.780	1.085
2022		1.143	1.117	1.036	1.070	1.074	1.152	1.362	1.135	1.007	1.078
2023		1.402	1.247	1.177	1.245	1.275	1.326	1.694	1.262	1.027	1.058
Adopted (b)		**1.296**	**1.130**	**1.169**	**1.141**	**1.202**	**1.345**	**1.368**	**1.229**	**1.204**	**1.067**

Notes: (a) defined as: (CE at end of year + payments in the year) / CE at beginning of year adjusted for normal inflation

(b) In 30 June 2023 values, adopted for 30 June 2023 valuation

Payment factors for case estimates outstanding

Financial	Payments to case estimates (a) for development year:									
Year	0	1	2	3	4	5	6	7	8	9	10 onwards
2015		0.577	0.485	0.361	0.328	0.304	0.410	0.149	0.152	0.414	0.150
2016		0.491	0.586	0.684	0.311	0.487	0.388	0.228	0.270	0.265	0.136
2017		0.678	0.509	0.760	0.464	0.357	0.765	0.436	0.169	0.190	0.255
2018		0.667	0.571	0.466	0.686	0.273	0.326	0.274	0.388	0.137	0.196
2019		0.661	0.589	0.507	0.473	0.715	0.544	0.378	0.359	0.318	0.196
2020		0.588	0.514	0.701	0.455	0.325	0.737	0.576	0.264	0.327	0.165
2021		0.626	0.543	0.565	0.651	0.479	0.730	0.370	0.588	0.430	0.236
2022		0.546	0.440	0.610	0.616	0.461	0.263	0.474	0.148	0.187	0.160
2023		0.595	0.461	0.427	0.499	0.436	0.148	0.847	0.602	0.269	0.272
Adopted (b)		**0.588**	**0.494**	**0.557**	**0.538**	**0.408**	**0.507**	**0.552**	**0.416**	**0.306**	**0.205**

Notes: (a) defined as: Payments made in the year / case estimates at beginning of the year

(b) In 30 June 2023 values, adopted for 30 June 2023 valuation

Estimates from model

Combined (all payment types) PCE method Accident Year	Estimated outstanding claims claims at 30 June 2023 ($000s) (a) PCE method
2014 & earlier	38,011
2015	6,520
2016	9,505
2017	8,513
2018	18,647
2019	10,559
2020	26,420
2021	35,660
2022	59,141
2023	94,371
Total	**307,346**

Notes: (a) From models described above, in 30 June 2023 values, excluding the 2015 legislative amendments

Large claims

Large claims ($000s) Accident year	Case estimates (a)	Development factor (b)	Current values (c)
2014 & earlier	16,914	0.25	4,229
2015	1,100	0.00	0
2016	5,163	0.00	0
2017	2,879	0.00	0
2018	1,446	0.00	0
2019	0	0.00	0
2020	5,801	1.00	5,801
2021	6,575	1.00	6,575
2022	2,445	1.00	2,445
2023	5,747	1.00	5,747
Total	**48,070**		**24,796**

Notes: (a) Provided by the insurers

(b) We have adopted a development factor of 1 where we consider that the valuation by payment types include insufficient allowance for the large claims. Where the valuation by payment type has sufficient allowance, we have adopted a development factor of 0. We have adopted a factor of 0.25 for 2014 & earlier to account for the combination of the individual payment methods and PCE method generally being sufficient to account for the large claims.

(c) = (a) x (b)

C.4 Adopted estimates of outstanding claims

C.4.1 Gross central estimates from models in 30 June 2023 values, excluding allowance for Act changes

Estimates of outstanding claims at 30 June 2023 ($000s) (a) (b)										
	By payment type method						All payments			
Accident year	Weekly Benefits	Medical And Hospital	Allied Health, Vocational Rehabilitation, Non-Compensation Payments (Other), Death	Other Goods And Services	Legals	Redemptions And Non-Economic Lump Sum	Sum of individual payment methods (c)	Combined PCE method (d)	Allowance for active large claims	Total (e)
2014 & earlier	9,244	3,602	3,665	10,448	3,682	33,570	64,211	38,011	4,229	48,789
2015	2,357	512	637	1,949	968	5,506	11,929	6,520	0	7,872
2016	1,774	372	491	1,360	785	4,384	9,165	9,505	0	9,420
2017	1,642	370	467	1,212	729	4,279	8,698	8,513	0	8,559
2018	4,314	949	1,239	2,215	2,028	13,974	24,720	18,647	0	21,684
2019	3,483	846	990	1,628	1,615	10,604	19,166	10,559	0	19,166
2020	4,153	1,037	1,219	1,502	1,963	12,267	22,142	26,420	5,801	27,943
2021	6,835	1,591	2,202	1,856	3,124	20,046	35,654	35,660	6,575	42,228
2022	13,144	3,473	4,921	2,987	4,782	30,090	59,396	59,141	2,445	61,841
2023	24,713	9,234	11,224	5,127	6,227	35,538	92,062	94,371	5,747	97,808
Total	**71,658**	**21,984**	**27,057**	**30,282**	**25,903**	**170,259**	**347,142**	**307,346**	**24,796**	**345,312**

Notes: (a) From models described in Appendix C3, excluding allowance for the 2015 legislative amendments

(b) In 30 June 2023 values and includes superimposed inflation

(c) sum of all estimates from the individual by payment type method

(d) result from the combined PCE method described in Appendix C3.8

(e) weighted average of (c) and (d) plus the allowance for active large claims. The weights for 2017 and earlier years are 25% x (c) + 75% x (d) and the weights for 2018 is 50% x (c) + 50% x (d) while, the weights for 2019 and onwards are 100% x (c).

C.4.2 Gross central estimates from models in 30 June 2023 values, including allowance for Act changes

Estimates of outstanding claims at 30 June 2023 ($000s) (a) (b)										
	By payment type method						All payments			
Accident year	Weekly Benefits	Medical And Hospital	Allied Health, Vocational Rehabilitation, Non-Compensation Payments (Other), Death	Other Goods And Services	Legals	Redemptions And Non-Economic Lump Sum	Sum of individual payment methods (c)	Combined PCE method (d)	Allowance for active large claims	Total (e)
2014 & earlier	9,244	3,602	3,665	10,448	3,682	33,570	64,211	38,011	4,229	48,789
2015	2,357	512	637	1,949	968	5,506	11,929	6,520	0	7,872
2016	819	172	226	628	785	4,384	7,013	9,505	0	8,882
2017	758	171	215	559	729	4,279	6,711	8,513	0	8,063
2018	1,991	496	632	1,054	2,028	13,974	20,176	18,647	0	19,411
2019	1,799	536	608	829	1,615	10,604	15,991	10,559	0	15,991
2020	2,616	754	868	823	1,963	12,267	19,291	26,420	5,801	25,092
2021	5,253	1,298	1,836	1,130	3,124	20,046	32,688	35,660	6,575	39,263
2022	11,289	3,120	4,470	2,069	4,782	30,090	55,820	59,141	2,445	58,265
2023	22,861	8,875	10,761	4,165	6,227	35,538	88,425	94,371	5,747	94,172
Total	**58,986**	**19,534**	**23,919**	**23,655**	**25,903**	**170,259**	**322,256**	**307,346**	**24,796**	**325,801**

Notes: (a) From models described in Appendix C3, including allowance for the 2015 legislative amendments

(b) In 30 June 2023 values and includes superimposed inflation

(c) sum of all estimates from the individual by payment type method

(d) result from the combined PCE method described in Appendix C3.8

(e) weighted average of (c) and (d) plus the allowance for active large claims. The weights for 2017 and earlier years are 25% x (c) + 75% x (d) and the weights for 2018 is 50% x (c) + 50% x (d) while, the weights for 2019 and onwards are 100% x (c).

C.4.3 Average claim size

Average claim size at 30 June 2023 ($) (a)										
	By payment type method						All payments			
Accident year	Weekly Benefits	Medical And Hospital	Allied Health, Vocational Rehabilitation, Non-Compensation Payments (Other), Death	Other Goods And Services	Legals	Redemptions And Non-Economic Lump Sum	Sum of individual payment methods (b)	Combined PCE method (c)	Allowance for active large claims	Adopted (d)
2015	14,696	6,684	5,052	3,350	2,933	17,623	50,340	48,299		48,809
2016	14,584	6,523	5,143	2,729	2,608	14,165	45,753	46,733		46,488
2017	16,455	6,477	5,711	2,506	2,201	12,572	45,921	46,665		46,479
2018	20,188	8,152	7,681	3,074	3,830	21,759	64,684	64,056		64,370
2019	14,682	6,239	6,162	2,161	2,536	13,661	45,441	42,975		45,441
2020	13,926	7,625	7,186	2,906	3,044	14,677	49,364	53,215		52,498
2021	13,442	7,719	6,710	2,859	2,726	14,810	48,266	49,814		51,690
2022	15,654	7,995	7,828	3,304	3,572	19,219	57,572	59,354		58,884
2023	17,103	9,047	8,194	3,233	3,842	20,197	61,616	64,865		64,757

Note: (a) In 30 June 2023 values, from results in Appendix C4.2, includes superimposed inflation and 2015 legislation amendments

(b) In 30 June 2023 values, from the results based on individual payment type methods

(c) In 30 June 2023 values, based on the combined (all payment types) PCE method

(d) Adopted average claim size is based on (e) in table C4.2 divided by (c) in C3.1 number of claims incurred.

C.4.4 Relationship to case estimates

Ratio of outstanding to case estimates at 30 June 2023 ($) (a)										
	By payment type method							All payments		
Accident year	Weekly Benefits	Medical And Hospital	Allied Health, Vocational Rehabilitation, Non-Compensation Payments (Other), Death	Other Goods And Services	Legals	Redemptions And Non-Economic Lump Sum	Sum of individual payment methods (b)	Combined PCE method (c)	Allowance for active large claims	Adopted (d)
2014 & earlier	31%	12%	12%	35%	12%	113%	217%	168%	14%	165%
2015	53%	11%	14%	44%	22%	123%	267%	154%	0%	176%
2016	14%	3%	4%	11%	13%	74%	118%	164%	0%	150%
2017	17%	4%	5%	12%	16%	93%	147%	177%	0%	176%
2018	22%	5%	7%	12%	22%	155%	223%	205%	0%	215%
2019	35%	10%	12%	16%	31%	206%	310%	207%	0%	310%
2020	18%	5%	6%	6%	13%	82%	130%	186%	39%	169%
2021	24%	6%	8%	5%	14%	92%	151%	160%	30%	181%
2022	29%	8%	12%	5%	12%	78%	145%	146%	6%	152%
2023	41%	16%	19%	7%	11%	63%	157%	128%	10%	167%

Note: (a) In 30 June 2023 values, from results in Appendix C4.2, includes superimposed inflation and 2015 legislation amendments

(b) In 30 June 2023 values, from the results based on individual payment type methods

(c) In 30 June 2023 values, based on the combined (all payment types) PCE method

(d) Adopted is based on (e) in table C4.2 divided by case estimates in 30 June 2023 values

C.4.5 Summary of gross adopted estimates in 30 June 2023 values

Accident year	Estimate of outstanding claims (a)	Estimate of outstanding claims (b)	Average claim size (b)	Ratio of outstanding to case estimates (b)
	$000s	$000s	$	
2014 & earlier	97,808	94,172	64,757	167%
2015	61,841	58,265	58,884	152%
2016	42,228	39,263	51,690	181%
2017	27,943	25,092	52,498	169%
2018	19,166	15,991	45,441	310%
2019	21,684	19,411	64,370	215%
2020	8,559	8,063	46,479	176%
2021	9,420	8,882	46,488	150%
2022	7,872	7,872	48,809	176%
2023	48,789	48,789		165%
Total	**345,312**	**325,801**		**171%**

Notes: (a) In 30 June 2023 values, including superimposed inflation but excluding the 2015 legislative amendments

(b) Including the 2015 legislative amendments

C.4.6 Gross adopted estimates excluding expenses

Accident year ending 30 June	30 June 2023 values	Inflated values	Infl/disc values
2014 & earlier	48,789	58,748	46,789
2015	7,872	9,559	7,529
2016	8,882	10,476	8,560
2017	8,063	9,436	7,784
2018	19,411	22,875	18,704
2019	15,991	19,303	15,308
2020	25,092	29,361	24,237
2021	39,263	45,086	38,099
2022	58,265	66,005	56,723
2023	94,172	105,512	91,945
Total	**325,801**	**376,361**	**315,678**

Note: Includes superimposed inflation and 2015 legislative amendments

C.4.7 Net outstanding claims provision

Estimates at 30 June 2023 ($000s)							
	Gross o/s liability (a)	Reinsurance recoveries (b)	Net o/s liability (c)	Claims handling expenses (d)	Net central estimate (e)	Risk margin (f)	Net Provision (g)
Total	315,678	12,900	302,778	18,167	320,945	38,743	359,688

Notes: (a) from table above

(b) based on the reinsurance information provided by insurers on large claims

(c) = (a) – (b)

(d) = (c) x 6%

(e) = (c) + (d)

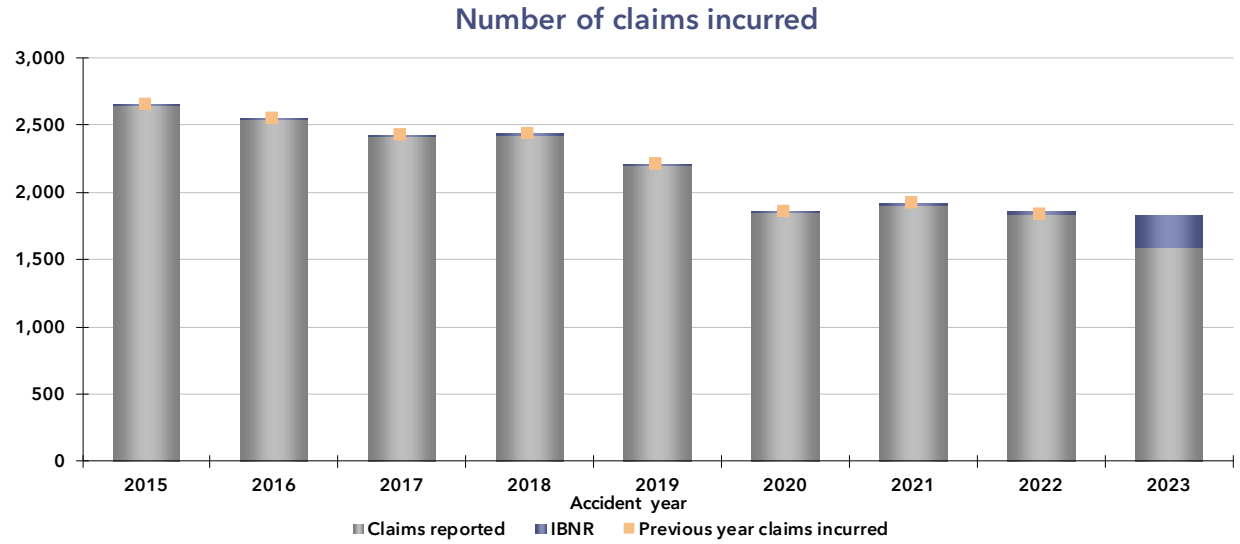
(f) = (e) x 12.07%

(g) = (e) + (f)

D Insurer claims statistics

D.1 Number of claims incurred

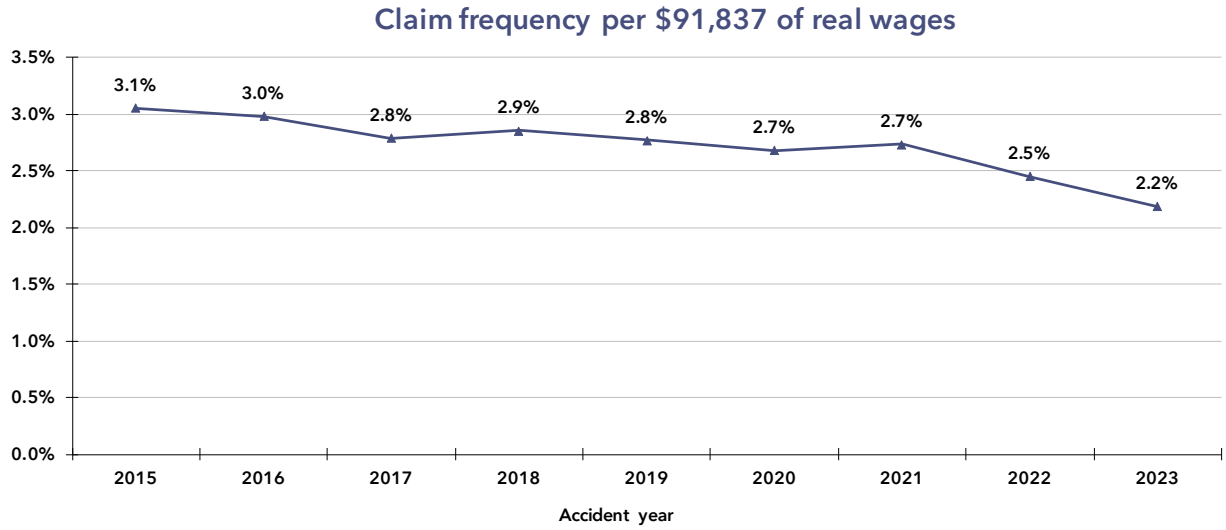
Decreasing trend from 2015 to 2023



The main points to highlight from this chart are:

- The number of claims incurred for the 2015 accident year was about 2,650
- From the 2015 to 2020 accident years, there has been a decreasing trend in the number of claims incurred to 1,850 for the 2020 accident year
- For the 2021 accident year, the number of incurred claims at 1,920 claims is slightly higher than the 2020 accident year but lower than 2019 and all prior years. The increase between 2020 and 2021 is partially due to Catholic Church claims being included in the insurer category from 1 December 2020
- For the 2023 accident year, the number of incurred claims of 1,830 claims is lower than all prior accident years.
- The numbers of claims are similar to those estimated at the previous valuation, except for 2022 which is higher than expected.

Declining claim frequency due to significant increases in wages up to 2015 and more recently due to reducing number of claims incurred. 2023 is lower than 2022 as the number of claims decreased while wages increased



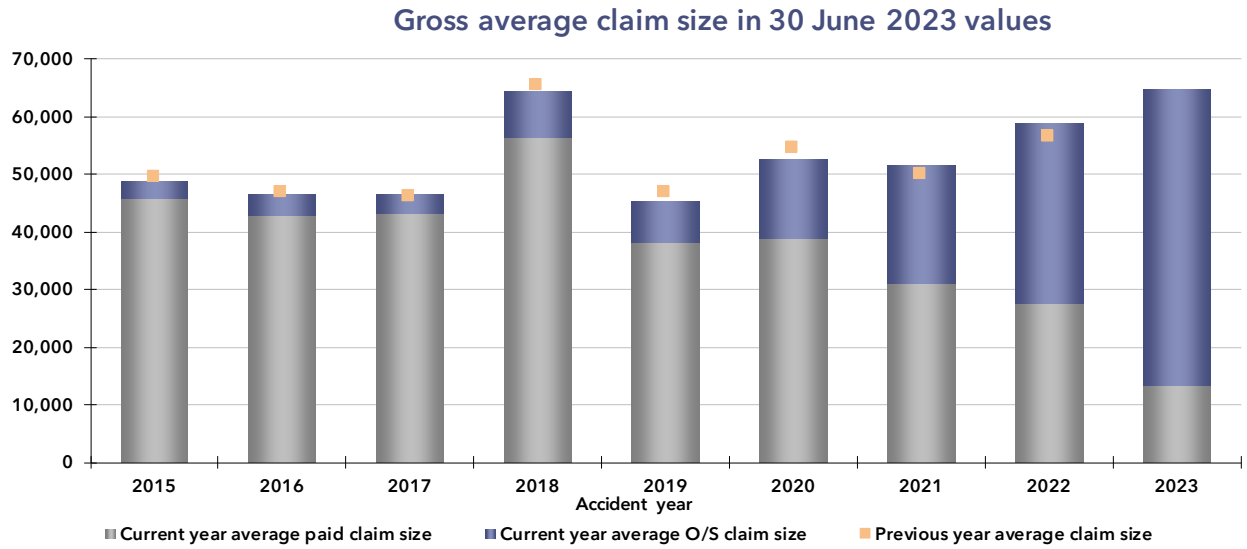
The claim frequency is calculated as:

$$\frac{\text{the number of claims incurred}}{\text{estimated number of full time equivalent employees}}$$

To estimate the number of employees we have used the wages provided, inflated this to 2023 values and divided by $91,837 (the full time average weekly earnings for the NT from the ABS catalogue 6302). We have not used the number of employees provided in the ANZSIC data, as these are not full time equivalent.

D.2 Gross average claim size

2023 is estimated to be higher than most prior years except 2018



Since 2015 the gross average claim size (in 2023 values):

- Exhibited volatility due in part to large claims, especially the average of $64,370 in 2018
- Exhibited a broadly increasing trend from around $48,813 in 2015 to around $58,884 in 2022 and $64,757 in 2023

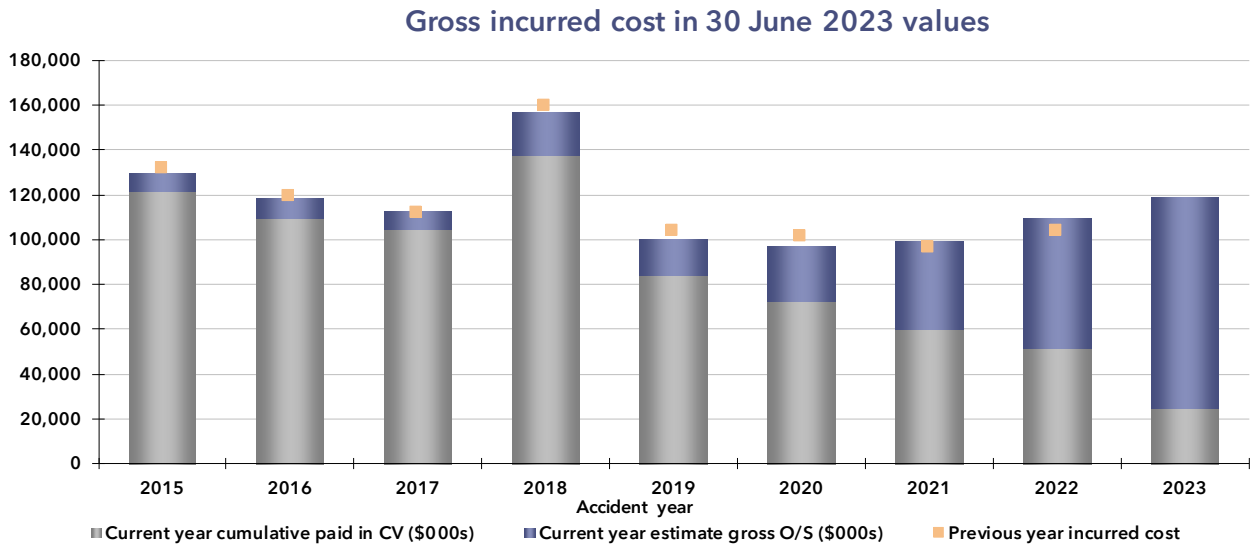
The uncertainty about the future development means that the ultimate level and our estimates may differ from those projected for recent accident years. This is especially true for the 2023 accident year, where a high proportion (79%) of the average claim size relates to uncertain future claims development.

Compared to the previous valuation, the gross average claim size is lower for 2018 to 2020 and higher for 2021 and 2022. This reflects changes in total estimates over the year.

Appendix E contains the average claim size split by payment type. The mix of payment types across the accident years has remained stable. Redemptions and non-economic lump sums are the largest payment type, closely followed by weekly benefits. These two payment types account for just under two thirds of total incurred costs.

D.2.1 Gross incurred cost

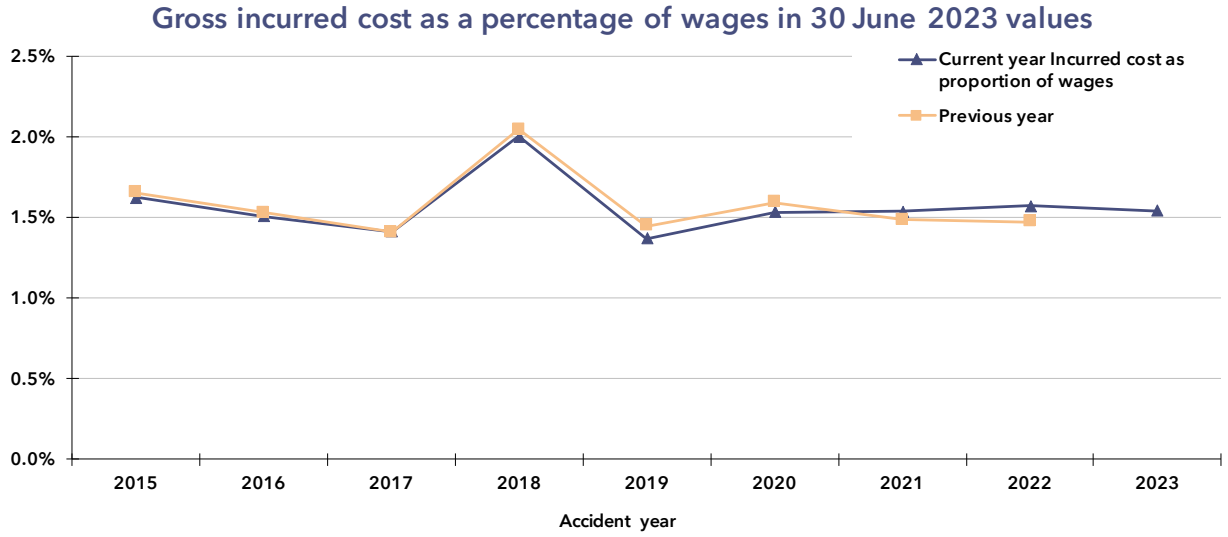
2023 incurred cost is $118 million, which is higher than the last four accident years



The incurred cost is the combination of the trends of the decreasing number of claims incurred and increasing average claim size.

Over the period shown in the graph, the proportion outstanding increases from 6% of the total incurred cost in 2015 to 79% of the total incurred cost for 2023.

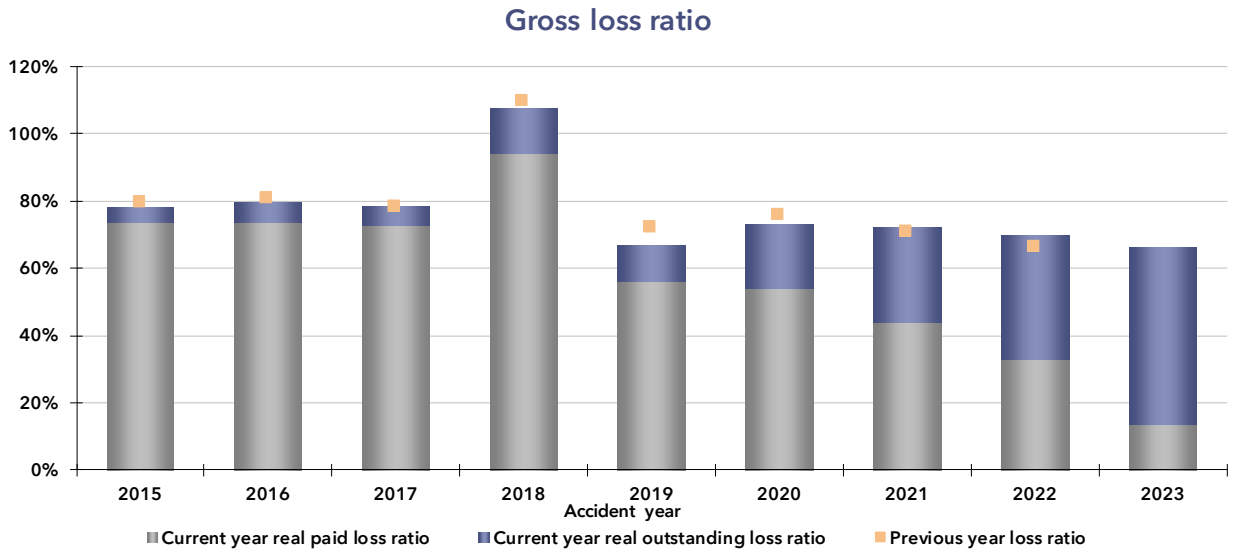
The 2023 gross incurred cost as a percentage of wages is similar to 2022 at 1.6%



2021 and 2022 has slightly increased since our previous valuation due to a decrease in the reported real wages and an increase in incurred cost for 2022. 2018 to 2020 have slightly decreased due to the decrease in the incurred cost and increase in wages for 2018.

D.2.2 Gross loss ratios

Loss ratio for 2023 estimated at 66%, which is lower than all prior years



The gross loss ratios are calculated for each accident year using the following formula:

$$\frac{\text{(Past claim payments to 30 June 2023+ estimated outstanding liability at30 June 2023)}}{\text{Gross developed earned premium}}$$

The past claim payments estimated outstanding liability and gross developed earned premium are all in 30 June 2023 values i.e., current values, and the estimated outstanding liability includes allowance for future superimposed inflation.

These ratios are not a proper measure of profitability, as they do not allow for investment returns or expenses. Nevertheless, as a crude measure, they do provide an indication of trends in the experience.

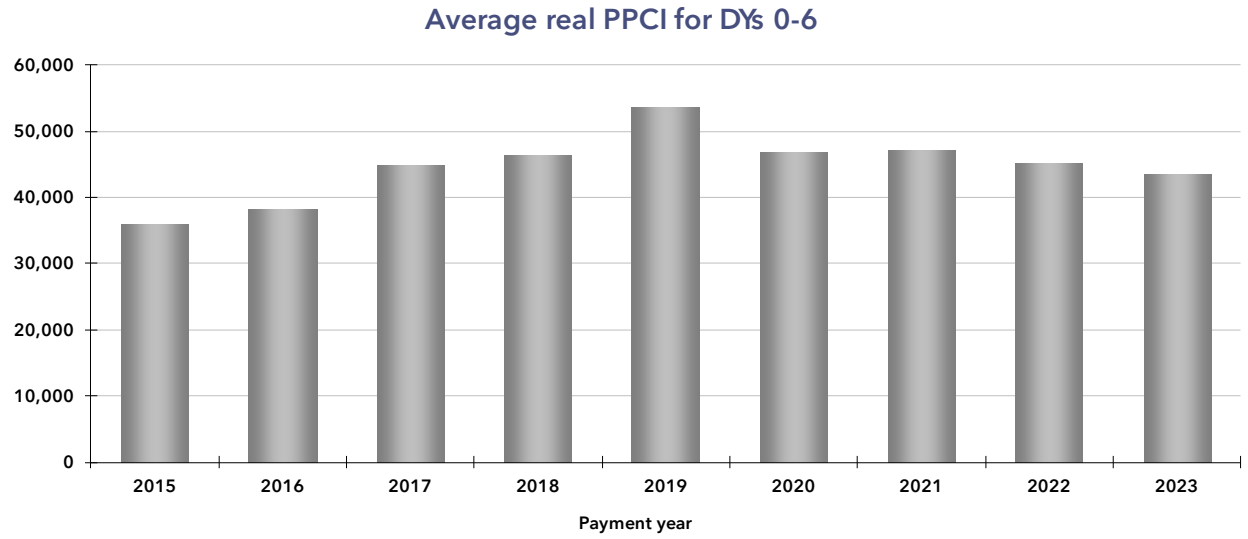
The chart shows:

- The loss ratio was around 80% in 2015 to 2017
- The 2018 loss ratio of 105% is higher than all prior years
- 2019 to 2022 is lower than most prior years at around 70% to 75%
- For 2023, the loss ratio is 66%, which is lower than 70% for 2022 and lower than all prior years

D.2.3 Payment per claim incurred

By payment year

The 2023 payment year was slightly lower than 2022 and on the lower end of the range of $43,000 to $47,000 for 2017 onwards (excluding 2019)

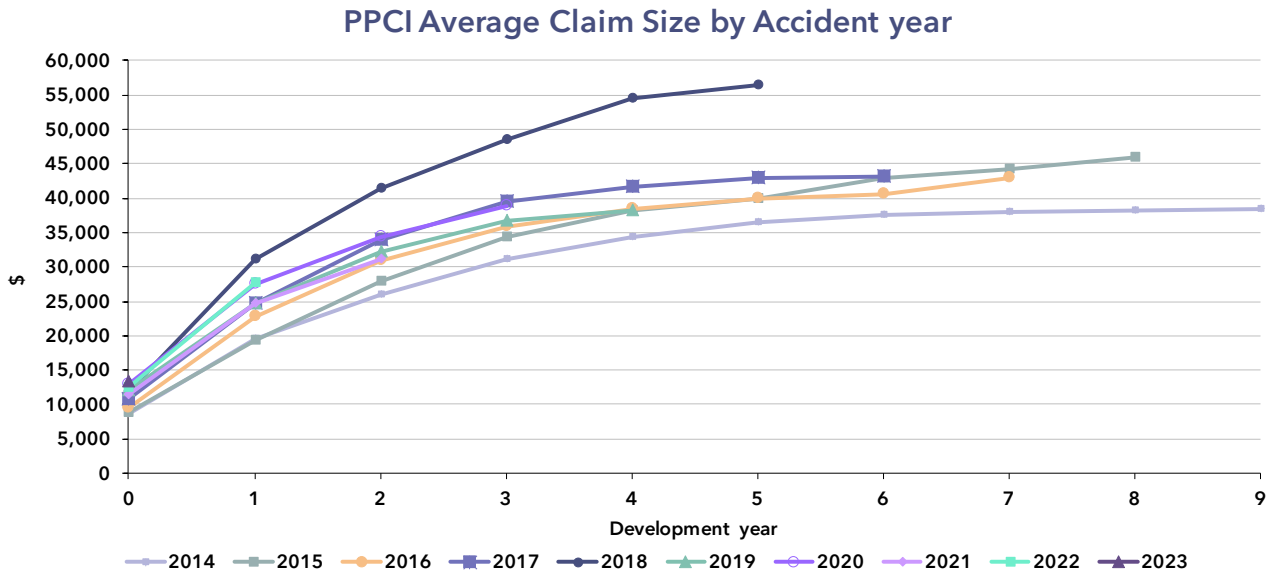


The average PPCI for Dys 0 to 6 was relatively stable between $36,000 and $38,300, up until 2016.

The average PPCI increased by 17% to $44,800 in 2017 due to higher payments for the three most recent accident years. It has remained between $43,000 and $47,000 for 2017 to 2023, except for the high in 2019. The 2019 payment year is $53,600, mainly due to high payments for 2018 accident year.

By accident year

Evidence of superimposed inflation



The chart above shows cumulative PPCI by accident year. This is calculated as:

$$\frac{\text{sum of claim payments by development year made to date (in 30 June 2023 values)}}{\text{number of claims incurred to date}}$$

As the values in the chart are all in current values, any differences are the result of a change in the real cost of each claim. This is also referred to as superimposed inflation. The chart is based entirely on actual experience, and there are no future projections included in this graph.

The experience by accident year has been variable, and there is evidence of superimposed inflation over recent years from 2015. Though 2019's growth has slowed as it is below 2017 from DY2 onwards, it was similar to 2017 in DY1 and in DY0 it was in line with 2018.

DY0 and DY1 for 2020 is higher than all prior years except for 2018 though similar to 2017 in DY2 and DY3. 2021 is below 2020 but similar to 2019 and 2017. 2022 is similar to 2020 at DY1. Meanwhile, 2023 is starting at a higher level than all prior years.

E Insurer financial year claims experience

E.1 Aggregate claims experience during 2022/23

E.1.1 Summary of overall claim experience over 2022/23

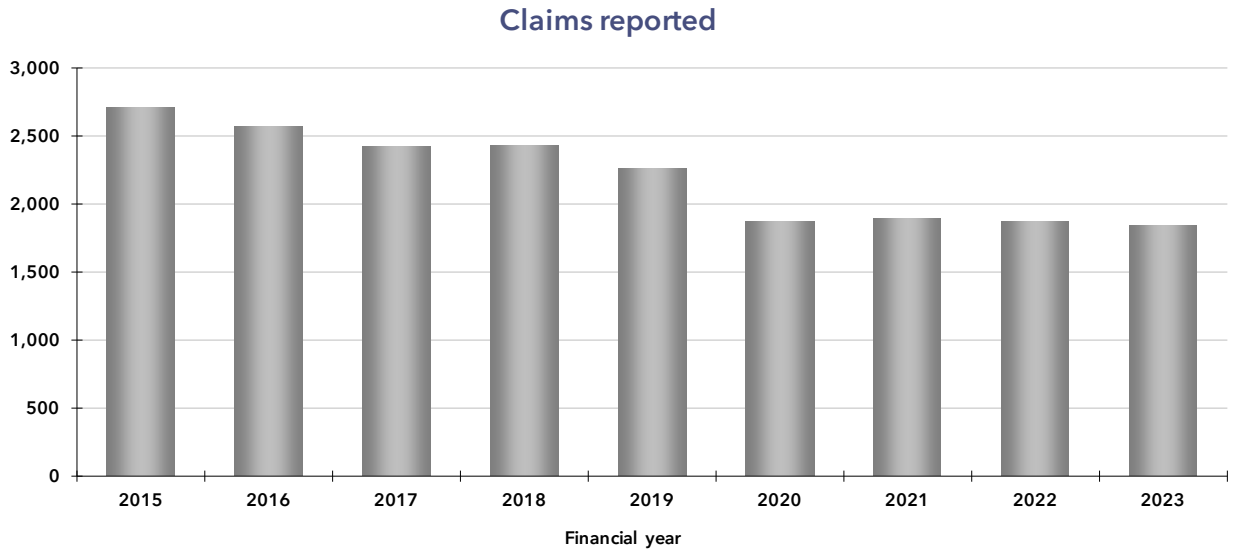
The overall claims experience over 2022/23 is worse than 2021/22, however the experience is mixed by accident year.

- A decrease (2.1%) in the number of claims reported
- An increase (1.8%) in the amount of real claim payments
- An increase (9.6%) in the number of active claims at the end of the year
- A slower finalisation rate (52.5% compared to 56.6% for 2022)
- An increase (17.1%) in case estimates.

The experience for each of these items is described in more detail below.

E.1.2 Claim reports

Claim reports have decreased by 2.1% in *2023*

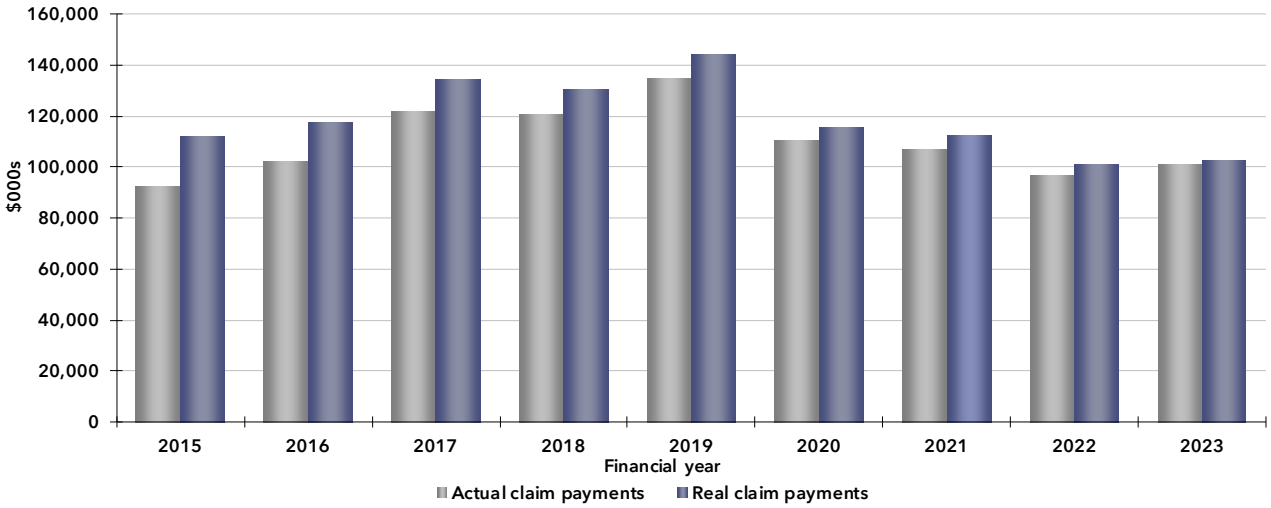


In the 2023 financial year there were 1,836 claims reported, which was 40 (2.1%) lower than 2022.

E.1.3 Claim payments

Real payments in *2023* of $102.8 million, $1.8 million higher than *2022*

Total payments made each financial year, actual and in 30 June 2023 values



The purple bars of payments have been adjusted for wage inflation to allow for comparison between the financial years.

Claim payments in 30 June 2023 values have varied between $101 million and $144 million over the period shown.

Total actual payments in 2022/23 were $101.1 million, which is $4.6 million (4.7%) higher than actual payments in 2021/22. In real values, this was an increase of $1.8 million (1.8%).

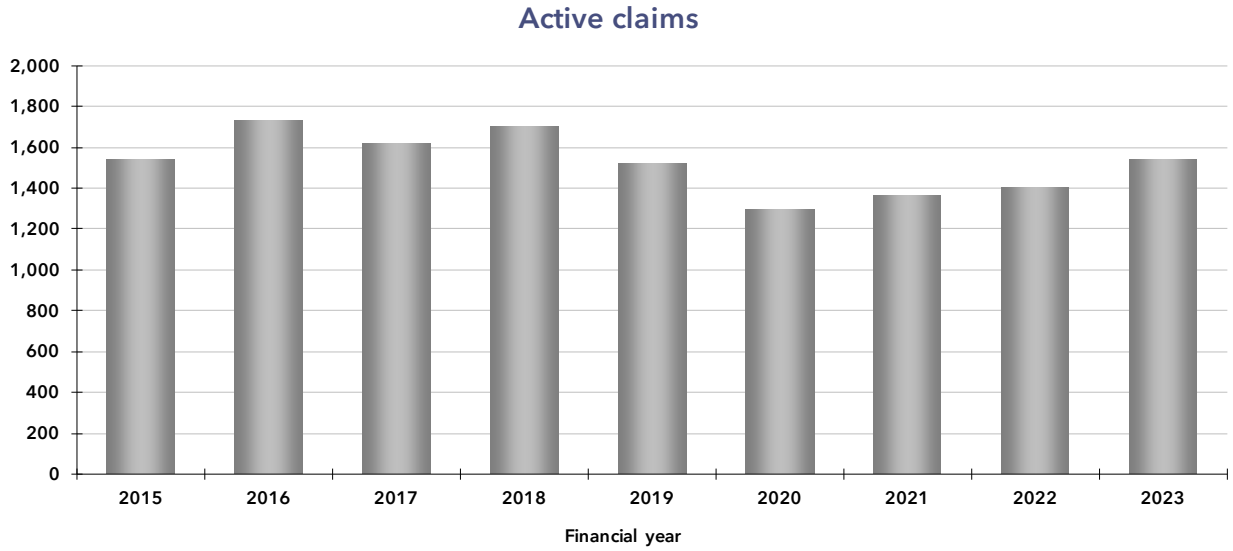
A breakdown of the change in actual payments by payment group is presented in the table below.

Payment group	Payments in 2022/23 ($000s)	Payments in 2021/22 ($000s)	Difference ($)	Difference (%)
Weekly benefits	27,879	28,197	-318	-1.1%
Medical and hospital	15,052	14,811	240	1.6%
Allied health, vocational rehabilitation, non-compensation payments (other), death	14,111	11,803	2,308	19.6%
Other goods and services	6,926	6,032	894	14.8%
Legals	6,801	5,005	1,796	35.9%
Redemptions and non-economic lump sum	30,362	30,726	-364	-1.2%
Total	**101,130**	**96,574**	**4,557**	**4.7%**

The higher payments in the 2022/23 financial year were driven by all payments groups except Weekly benefits and Redemptions and non-economic lump sum. Allied health, vocational rehabilitation, non-compensation payments (other), death and Legals had the largest increases.

E.1.4 Active claims

Active claim numbers increased by 9.6% from 1,405 in *2022* to 1,540 in *2023*

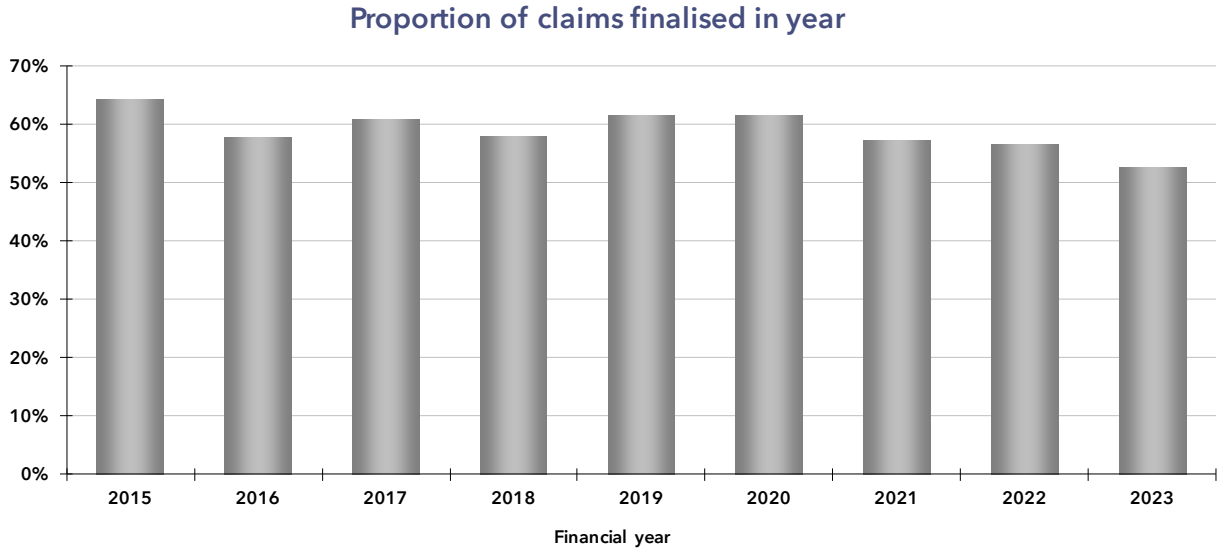


From 2015 to 2018, there was an increasing trend in active claims, despite the reduction in the claims reported. In 2019 and 2020 the number of active claims reduced, though to a smaller extent than the reduction in the number of claims reported. The number of active claims have increased over 2021 to 2023. The active claims in 2023 is similar to the 2019 level despite substantially fewer claims reported in 2023 compared to 2019.

There has been an increase from 1,405 to 1,540 active claims over the 2023 financial year, a 9.6% increase due a slower finalisation rate in the financial year.

E.1.5 Proportion of claims finalised

***2023* finalisation rate was 52.5%, which is lower than 2022 and all prior years**



Probabilities of claim finalisation is defined as:

$$\frac{\text{Number of claims finalised in year}}{\text{(Number of outstanding at beginning of the year plus number reported during the year)}}$$

Over the period shown on the graph there has been a broadly decreasing trend in finalisation rates. For 2023, proportion of claims finalised was at 52.5% which was lower than 2022 and all prior years.

E.1.6 Claims incurred in 2023

There were 1,586 claims reported to 30 June 2023 for the 2023 accident year and the projected number of incurred claims is 1,830. This is 1.8% lower than the 1,863 projected incurred for the 2022 accident year.

The expected number of open claims for the 2023 accident year at 30 June 2023 is 1,586 x (1 – 0.5680) = 685. The actual number of open claims for the 2023 accident year at 30 June 2023 is 854, which is 24.6% higher than expected.

The 30 June 2022 projection basis led to an expected $11,952 x (1.010 x 1.016) = $12,059 to be paid on each of the 2023 accident year claims in the year of claim. The actual amount paid per claim was $13,294 i.e., $1,027 (8.4%) more in real values.

The average total estimates (paid plus case estimates) per claim reported in real values for the 2023 accident year is $50,806 which is 16.2% higher than 2022.

The 2023 accident year on balance is higher than 2022 with higher average total estimates per claim reported, more open claims, higher payments per claim than expected but fewer claims incurred.

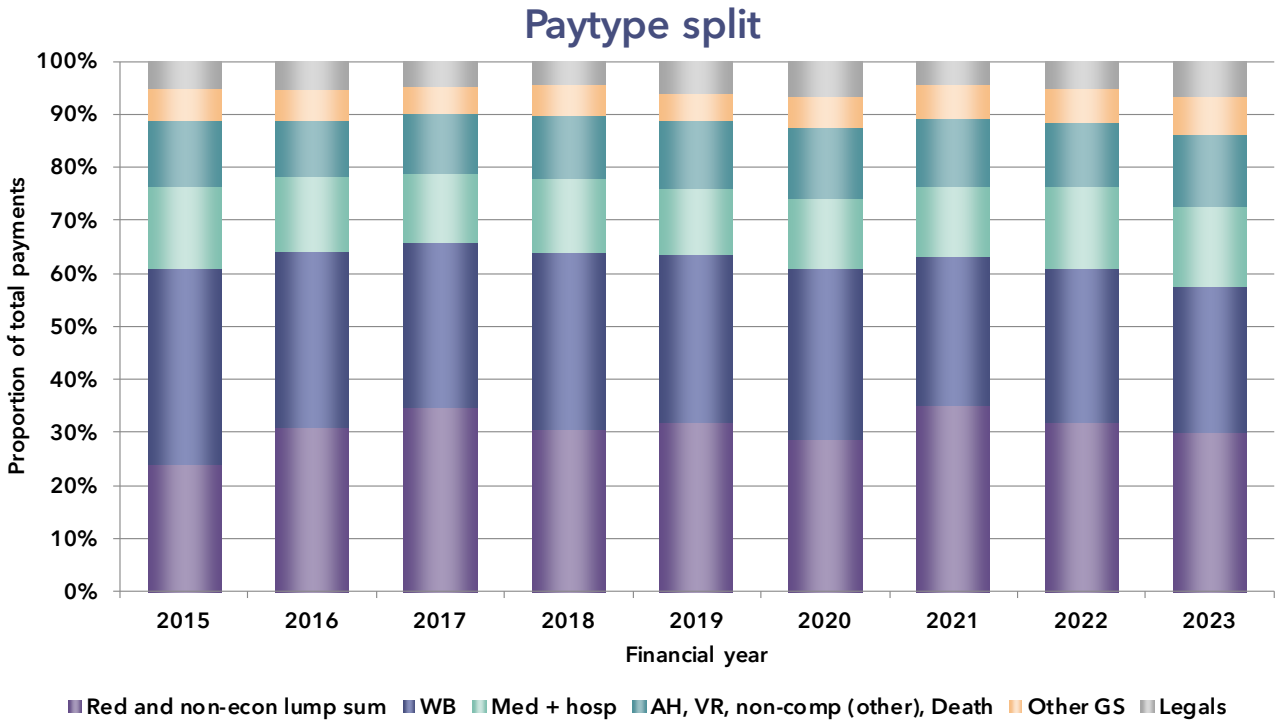
For details of the claims experience over the 2023 financial year for claims incurred up to 30 June 2022 see Appendix C2.

E.2 Analysis by payment group

The purpose of this section is to investigate trends in the composition of incurred costs by benefit type. We use higher level groups to explore the relative movement of periodic and lump sum benefits. We have performed this analysis based on the claim payment data and our outstanding claims valuation results.

E.2.1 Distribution by financial year

The following chart shows how the actual payments made in a financial year are split between the payment groups over the past nine years.



Payment type split	2015	2016	2017	2018	2019	2020	2021	2022	2023
Legals	5%	5%	5%	5%	6%	7%	5%	5%	7%
Other GS	6%	6%	5%	6%	5%	6%	6%	6%	7%
AH, VR, non-comp (other), Death	13%	11%	11%	12%	13%	13%	13%	12%	14%
Med + hosp	16%	14%	13%	14%	12%	13%	13%	15%	15%
WB	37%	33%	31%	33%	32%	32%	28%	29%	28%
Red and non-econ lump sum	24%	31%	35%	31%	32%	29%	35%	32%	30%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Over the last nine years, the split of payments by type have been variable, but there has been no maintained increase or decrease in any group. The key trends have been:

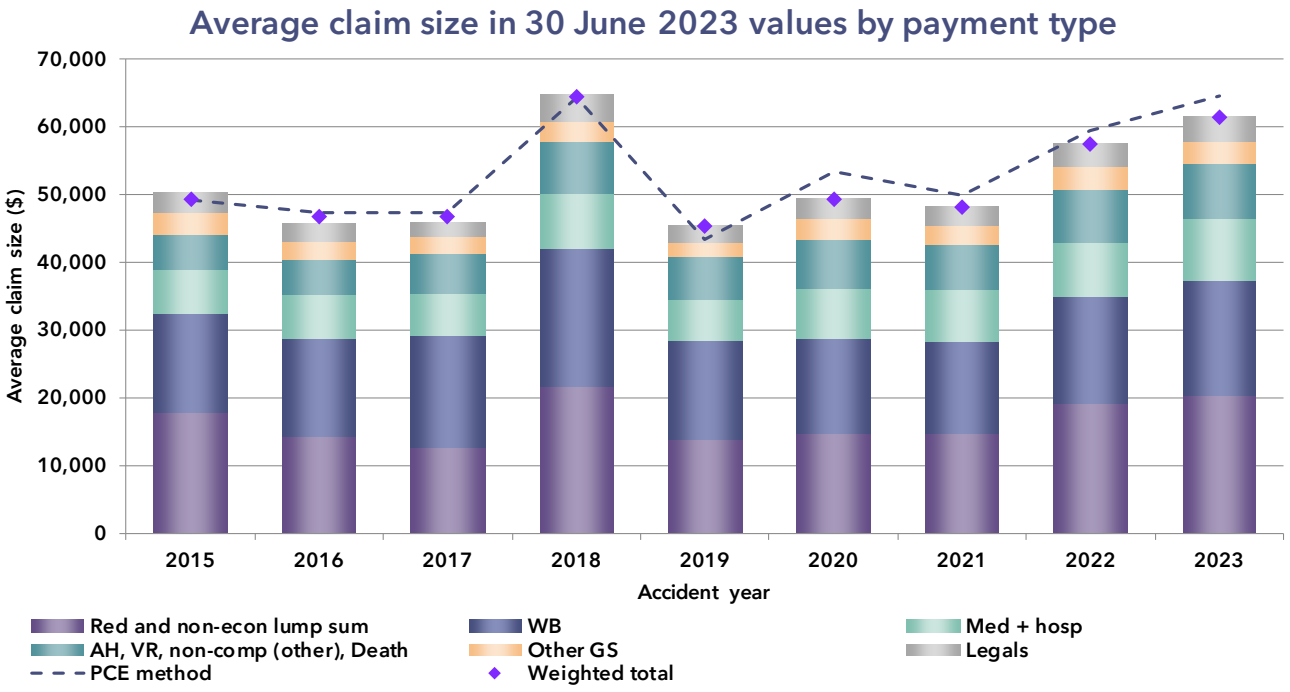
- Redemptions since 2015 has since ranged from 29% to 35%, except for the low in 2015 of 24%

- Any increases or decreases in redemptions payments have been matched by decreases or increases in weekly benefits payments, such that in total the proportion of total payments which are weekly benefits or redemptions has been relatively stable between 61% and 66% except for 2023 which is at 58% due to increases in the three smallest groups.
- The proportion of payments attributable to the other payment types has been relatively stable over the last nine years, but small increases in 2023.

This sort of analysis is important as it gives an indication of the cost drivers for the scheme and how these are changing, whether there is more use of periodic type payments, such as weekly benefits, or more lump sum payments, such as redemptions and non-economic lump sum. The dominance of one payment type over another will influence other cost drivers such as the total aggregate superimposed inflation.

E.2.2 Gross average claim size by payment group

Mix by payment type is relatively stable with weekly benefits and redemptions and non-economic lump sum combined accounting for just under two thirds of the total



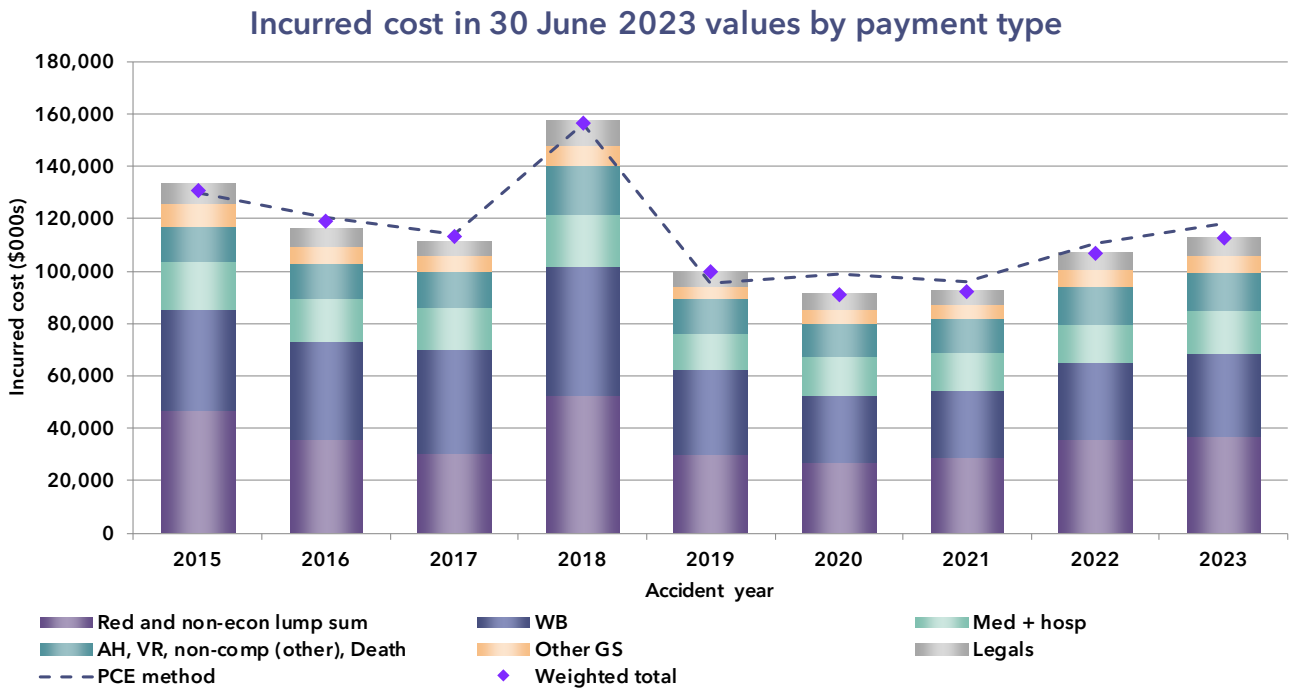
Average claim size (exclude explicit large claims) ($)	2015	2016	2017	2018	2019	2020	2021	2022	2023
Legals	2,933	2,608	2,201	3,830	2,536	3,044	2,726	3,572	3,842
Other GS	3,350	2,729	2,506	3,074	2,161	2,906	2,859	3,304	3,233
AH, VR, non-comp (other), Death	5,052	5,143	5,711	7,681	6,162	7,186	6,710	7,828	8,194
Med + hosp	6,684	6,523	6,477	8,152	6,239	7,625	7,719	7,995	9,047
WB	14,696	14,584	16,455	20,188	14,682	13,926	13,442	15,654	17,103
Red and non-econ lump sum	17,623	14,165	12,572	21,759	13,661	14,677	14,810	19,219	20,197
Total	**50,340**	**45,753**	**45,921**	**64,684**	**45,441**	**49,364**	**48,266**	**57,572**	**61,616**
PCE method	49,070	47,312	47,194	64,334	43,327	53,395	49,928	59,365	64,562
Weighted total	**49,387**	**46,922**	**46,876**	**64,509**	**45,441**	**49,364**	**48,266**	**57,572**	**61,616**

Note: weighted total is based on the weights given to the sum of individual methods by payment type (Total) and the combine PCE method. For 2017 and prior years, the weights are 25% total of individual payment type methods and 75% PCE method, for 2018, the weights were 50% total of individual payment type methods and 50% PCE method, while for 2019 and onwards, we have adopted 100% total of individual payment type methods.

The mix of payment types across the accident years has remained stable. Redemptions and non-economic lump sums and weekly benefits are the two largest payment types. These two groups combined account for just under two thirds of total payments however this proportion has decreased over the years to around 60% for the last five accident years.

E.2.3 Gross incurred cost by payment group

Relatively stable distribution by payment type across accident years



Incurred cost in current values (exclude explicit large claims) ($000s)	2015	2016	2017	2018	2019	2020	2021	2022	2023
Legals	7,776	6,630	5,331	9,319	5,587	5,635	5,234	6,654	7,031
Other GS	8,881	6,939	6,070	7,481	4,760	5,381	5,489	6,157	5,916
AH, VR, non-comp (other), Death	13,393	13,077	13,832	18,691	13,575	13,305	12,882	14,584	14,995
Med + hosp	17,719	16,584	15,687	19,838	13,745	14,117	14,820	14,895	16,555
WB	38,957	37,079	39,856	49,127	32,348	25,782	25,807	29,166	31,297
Red and non-econ lump sum	46,716	36,013	30,450	52,951	30,098	27,173	28,433	35,808	36,958
Total	**133,441**	**116,322**	**111,225**	**157,407**	**100,114**	**91,392**	**92,664**	**107,265**	**112,752**
PCE method	130,074	120,285	114,309	156,556	95,456	98,853	95,855	110,605	118,143
Weighted total	**130,916**	**119,294**	**113,538**	**156,982**	**100,114**	**91,392**	**92,664**	**107,265**	**112,752**

Percentage of incurred cost by payment type	2015	2016	2017	2018	2019	2020	2021	2022	2023
Legals	6%	6%	5%	6%	6%	6%	6%	6%	6%
Other GS	7%	6%	5%	5%	5%	6%	6%	6%	5%
AH, VR, non-comp (other), Death	10%	11%	12%	12%	14%	15%	14%	14%	13%
Med + hosp	13%	14%	14%	13%	14%	15%	16%	14%	15%
WB	29%	32%	36%	31%	32%	28%	28%	27%	28%
Red and non-econ lump sum	35%	31%	27%	34%	30%	30%	31%	33%	33%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

The table above shows that the proportion of the incurred cost attributable to each payment group has been variable between accident years, though with more stability between the accident years than the percentage by financial year in E2.1. Redemptions and non-economic lump sum payment group in particular is more stable as a percentage of the incurred cost.

F Self-insurer outstanding claims valuation

F.1 Data used in the valuation

F.1.1 Numbers of claims reported

Year to 30 June	NT WorkSafe self-insurers - Incremental Claims Reported											
	0	1	2	3	4	5	6	7	8	9	10	Total
2014	114	26	0	0	0	0	0	0	0	0	0	**140**
2015	114	12	1	0	0	0	0	0	0	0	0	**127**
2016	104	19	0	1	0	0	1	0	0	0	0	**125**
2017	76	17	0	0	0	0	1	0	0	0	0	**94**
2018	84	8	1	0	0	0	0	0	0	0	0	**93**
2019	68	10	1	0	0	0	0	0	0	0	0	**79**
2020	75	6	0	0	0	0	0	0	0	0	0	**81**
2021	60	12	0	0	0	0	0	0	0	0	0	**72**
2022	35	4	1	1	1	0	0	0	0	0	0	**42**
2023	34	3	0	0	1	0	0	0	0	0	0	**38**

Note: Data extracted from the WIMS system up to 30 June 2023

F.1.2 Cumulative claims reported

Year to 30 June	NT WorkSafe self-insurers - Cumulative Claims Reported											
	0	1	2	3	4	5	6	7	8	9	10	Total
2014	114	147	175	205	151	117	115	123	123	117	306	**1,693**
2015	114	126	148	175	205	151	117	115	123	123	423	**1,820**
2016	104	133	126	149	175	205	152	117	115	123	546	**1,945**
2017	76	121	133	126	149	175	206	152	117	115	669	**2,039**
2018	84	84	122	133	126	149	175	206	152	117	784	**2,132**
2019	68	94	85	122	133	126	149	175	206	152	901	**2,211**
2020	75	74	94	85	122	133	126	149	175	206	1,053	**2,292**
2021	60	87	74	94	85	122	133	126	149	175	1,259	**2,364**
2022	35	64	88	75	95	85	122	133	126	149	1,434	**2,406**
2023	34	38	64	88	76	95	85	122	133	126	1,583	**2,444**

Note: Cumulative claim reports from table above

F.1.3 Active claims

Year to 30 June	NT WorkSafe self-insurers - Active Claims												Total
	0	1	2	3	4	5	6	7	8	9	10	Total	Finalised
2016	43	15	3	0	1	2	0	0	0	0	0	**64**	**1,881**
2017	33	11	4	3	0	0	2	0	0	0	0	**53**	**1,986**
2018	29	12	10	1	1	0	2	0	0	0	0	**55**	**2,077**
2019	28	12	11	4	0	1	2	0	0	0	0	**58**	**2,153**
2020	28	6	7	4	0	0	0	0	0	1	1	**47**	**2,245**
2021	18	16	3	0	1	0	0	0	0	1	1	**40**	**2,324**
2022	16	9	12	1	1	0	0	0	0	0	1	**40**	**2,366**
2023	12	6	4	6	1	0	0	0	0	0	0	**29**	**2,415**

Note: From the self-insurers' Form B as at 30 June 2023. Active claim numbers are only available from 30 June 2016

F.1.4 Claim payments

Year to 30 June	NT WorkSafe self-insurers - Incremental Actual Claim Payments ($000s) 0	1	2	3	4	5	6	7	8	9	10	Total	Total Cumulative
2014	334	1,029	565	99	0	61	24	0	2	0	0	**2,115**	**16,235**
2015	425	430	622	574	86	0	5	189	0	12	0	**2,343**	**18,578**
2016	706	464	178	728	233	3	2	5	0	0	0	**2,320**	**20,898**
2017	555	544	474	77	0	0	4	3	4	0	0	**1,662**	**22,559**
2018	573	724	323	300	178	0	0	2	11	6	0	**2,117**	**24,676**
2019	637	914	582	210	1	3	1	0	10	5	2	**2,365**	**27,042**
2020	501	807	464	1,054	75	0	0	0	0	6	13	**2,921**	**29,962**
2021	647	950	187	463	137	0	0	0	0	2	53	**2,439**	**32,402**
2022	303	775	942	247	22	142	1	0	0	0	111	**2,545**	**34,946**
2023	196	413	513	982	85	-2	0	0	0	0	53	**2,241**	**37,188**

Note: Data extracted from the WIMS system up to 30 June 2023

F.1.5 Case estimates

Year to 30 June	NT WorkSafe self-insurers - Case Estimates Outstanding ($000s) 0	1	2	3	4	5	6	7	8	9	10	Total
2014	349	525	461	45	4	20	192	0	0	0	0	**1,596**
2015	340	216	482	239	50	4	58	0	0	0	0	**1,389**
2016	565	274	79	3	15	40	33	0	0	0	0	**1,009**
2017	540	319	143	85	6	0	14	0	0	0	0	**1,108**
2018	999	694	293	22	40	0	21	0	0	0	0	**2,070**
2019	512	766	636	139	9	5	47	0	0	0	0	**2,114**
2020	686	258	619	278	14	0	0	0	0	51	137	**2,043**
2021	1,160	1,769	115	0	101	0	0	0	0	40	79	**3,264**
2022	303	343	681	100	40	0	0	0	0	0	194	**1,661**
2023	141	189	193	249	25	0	0	0	0	0	0	**797**

Note: From the self-insurers' Form B as at 30 June 2023 and prior years.

F.2 Actual and projected claims experience during 30 June 2023

F.2.1 Numbers of claims reported

Accident year ended 30 June	Number of claims reported during 2022/23 Actual	Projected (a)	Actual / projected %
2015	0	0	0.0%
2016	0	0	0.0%
2017	0	0	0.0%
2018	0	0	0.0%
2019	1	0	56000.0%
2020	0	0	0.0%
2021	0	0	0.0%
2022	3	3	92.0%
Total	**4.0**	**3.3**	**121.1%**

Note: (a) From previous scheme report dated 21 March 2023

F.2.2 Claim payments

Accident year ended 30 June	Actual payments ($000s)	Expected Payments ($000s) (a)	Actual / expected %
2015	0	1	0.0%
2016	0	1	0.0%
2017	0	1	0.0%
2018	-2	27	-7.6%
2019	85	71	119.1%
2020	982	804	122.2%
2021	513	324	158.7%
2022	413	393	105.1%
Total	**1,992**	**1,622**	**122.8%**

Note: (a) From previous scheme report dated 21 March 2023

F.2.3 Case estimate development

Accident year ended 30 June	Expected Dev'ment Over Year (a)	Actual Dev'ment Over Year	Expected Ultimate Dev'ment (b)
2015	1.075	0.000	0.000
2016	1.100	0.000	0.000
2017	1.241	0.000	0.000
2018	1.182	-0.052	1.520
2019	1.132	1.080	1.213
2020	1.553	1.767	1.503
2021	1.649	2.012	2.616
2022	2.421	1.942	3.707
Total	**1.635**	**1.590**	**2.066**

Notes: (a) according to PCE model in Appendix F3.2 of our previous scheme report dated 21 March 2023

(b) according to estimates adopted in Appendix F4 of our previous scheme report dated 21 March 2023.

F.3 Analysis and projection models

F.3.1 Payment per claim incurred model

Claim notification pattern

Financial year ending 30 June	Chain ladder ratio (a) for development year: 1	2	3	4	5	6	7	8	9	10 onwards
2015	1.11	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2016	1.17	1.00	1.01	1.00	1.00	1.01	1.00	1.00	1.00	1.00
2017	1.16	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2018	1.11	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2019	1.12	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2020	1.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2021	1.16	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2022	1.07	1.01	1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00
2023	1.09	1.00	1.00	1.01	1.00	1.00	1.00	1.00	1.00	1.00
Adopted (b)	**1.10**	**1.01**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**

Notes: (a) Using cumulative claim report numbers from data

(b) Adopted for 30 June 2023 valuation

Numbers of claims incurred

Accident year ending 30 June	Number of claims: Reported to 30 Jun 2023 (a)	IBNR at 30 Jun 2023 (b)	Incurred (c)
2015	133	0	133
2016	122	0	122
2017	85	0	85
2018	95	0	95
2019	76	0	76
2020	88	0	88
2021	64	0	64
2022	38	1	39
2023	34	4	38

Notes: (a) from number reported in Appendix F1.1

(b) from pattern in chain ladder ratio table above

(c) = (a) + (b)

Average real payment per claim incurred

Financial year ending 30 June	Average Real Payment Per Claim Incurred (a) for development year: 0	1	2	3	4	5	6	7	8	9	10 onwards	Total
2015	3,870	4,129	5,056	3,969	503	0	54	1,985	0	122	0	**19,687**
2016	6,636	3,995	1,621	5,602	1,528	18	14	46	0	0	0	**19,459**
2017	7,173	4,901	3,919	670	0	0	22	18	39	0	0	**16,742**
2018	6,500	9,191	2,857	2,429	1,521	0	0	13	78	53	0	**22,641**
2019	8,978	10,293	7,335	1,846	4	28	5	0	54	37	14	**28,594**
2020	5,974	11,180	5,144	13,057	645	0	0	0	0	30	113	**36,144**
2021	10,523	11,259	2,582	5,101	1,694	0	0	4	0	10	290	**31,464**
2022	8,195	12,593	11,157	3,406	240	1,751	11	0	0	1	732	**38,087**
2023	5,222	10,872	8,108	11,304	1,139	-22	0	0	0	0	309	**36,931**
Adopted (b)	**7,826**	**10,873**	**7,113**	**6,718**	**990**	**486**	**58**	**47**	**26**	**15**	**0**	**34,152**

Notes: (a) In 30 June 2023 values

(b) Adopted for 30 June 2023 valuation

F.3.2 Projected case estimates model

Case estimate development

Financial year ending 30 June	Case Estimate Development (a) for development year: 1	2	3	4	5	6	7	8	9	10 onwards
2015	1.772	2.009	1.692	2.884	0.936	2.968	0.952	0.000	0.000	0.000
2016	2.109	1.160	1.486	1.018	0.830	8.381	0.079	0.000	0.000	0.000
2017	1.494	2.205	2.003	1.954	0.000	0.443	0.075	0.000	0.000	0.000
2018	2.575	1.893	2.211	2.516	0.000	0.000	0.168	0.000	0.000	0.000
2019	1.669	1.739	1.183	0.427	0.205	0.000	0.000	0.000	0.000	0.000
2020	2.074	1.406	2.089	0.639	0.000	0.000	0.000	0.000	0.000	0.000
2021	3.976	1.175	0.749	0.861	0.000	0.000	0.000	0.000	0.000	0.836
2022	0.957	0.911	2.998	0.000	1.398	0.000	0.000	0.000	0.000	5.767
2023	1.942	2.012	1.767	1.080	-0.052	0.000	0.000	0.000	0.000	0.000
Adopted (b)	**1.952**	**1.277**	**1.573**	**1.141**	**1.202**	**1.345**	**1.100**	**1.075**	**1.050**	**1.025**

Notes: (a) defined as: (CE at end of year + payments in the year) / CE at beginning of year adjusted for normal inflation

(b) In 30 June 2023 values, adopted for 30 June 2023 valuation

Payment factors for case estimates outstanding

Financial year ending 30 June	Payments to case estimates (a) for development year: 1	2	3	4	5	6	7	8	9	10 onwards
2015	1.193	1.149	1.207	1.843	0.000	0.252	0.952	0.000	0.000	0.000
2016	1.336	0.808	1.480	0.957	0.062	0.461	0.079	0.000	0.000	0.000
2017	0.942	1.695	0.952	0.000	0.000	0.101	0.075	0.000	0.000	0.000
2018	1.319	0.995	2.061	2.056	0.000	0.000	0.168	0.000	0.000	0.000
2019	0.914	0.838	0.716	0.024	0.082	0.000	0.000	0.000	0.000	0.000
2020	1.574	0.605	1.655	0.537	0.000	0.000	0.000	0.000	0.000	0.000
2021	1.387	0.727	0.749	0.495	0.000	0.000	0.000	0.000	0.000	0.836
2022	0.666	0.531	2.142	0.000	1.398	0.000	0.000	0.000	0.000	0.975
2023	1.340	1.468	1.414	0.837	-0.052	0.000	0.000	0.000	0.000	0.000
Adopted (b)	**1.050**	**0.698**	**1.251**	**0.538**	**0.408**	**0.507**	**0.552**	**0.416**	**0.306**	**0.205**

Notes: (a) defined as: Payments made in the year / case estimates at beginning of the year

(b) In 30 June 2023 values, adopted for 30 June 2023 valuation

F.4 Adopted estimates of outstanding claims

F.4.1 Gross central estimates from models in current values

Accident year ending 30 June	Estimates of Outstanding Claims ($000s) at 30 June 2023 (a)(b) PPCI	PCE	Case estimates
2015 & earlier	2	0	0
2016	5	0	0
2017	8	0	0
2018	14	0	0
2019	49	40	25
2020	145	373	249
2021	542	335	193
2022	606	321	189
2023	1,023	364	141
Total	**2,395**	**1,434**	**797**

Notes: (a) From models described in Appendix F3

(b) In 30 June 2023 values and includes superimposed inflation and excluding 2015 legislative changes

F.4.2 Average claim size

Accident year ending 30 June	Average Claim Size ($000s) at 30 June 2023 (a)(b) PPCI	PCE
2015	14	14
2016	17	17
2017	40	40
2018	27	27
2019	28	28
2020	41	44
2021	40	36
2022	35	27
2023	32	15

Note: (a) In 30 June 2023 values, from results in Appendix F4.1, includes superimposed inflation and excluding 2015 legislative changes

F.4.3 Adopted estimates in 30 June 2023 values

Accident year ending 30 June	Estimate of o/s claims ($000s)(a)(b)	Estimate of o/s claims ($000s)(b)(c)	Average claim size ($000s)(b)(c)	Ratio to case estimates (b)(c)
2015 & earlier	0	0		0%
2016	1	1	17	0%
2017	1	1	40	0%
2018	1	1	27	0%
2019	42	42	28	168%
2020	316	316	43	127%
2021	387	387	37	200%
2022	535	535	33	283%
2023	858	858	28	610%
Total	**2,142**	**2,142**		**269%**

Notes: (a) in 30 June 2023 values, including superimposed inflation and excluding 2015 legislative changes

(b) in 30 June 2023 values, including superimposed inflation and including 2015 legislative changes

(c) The adopted model is a composite weighted average of the statistical models. The weights attached to the models reflect the extent to which they are considered to appropriately project the experience of each accident year. We have used the PPCI method, except where the result is less than the case estimates.

Accident year ending 30 June	Weights Adopted For Estimates (a)(b) Method PPCI	PCE	Total
2015 & earlier	0.10	0.90	1.00
2016	0.10	0.90	1.00
2017	0.10	0.90	1.00
2018	0.10	0.90	1.00
2019	0.25	0.75	1.00
2020	0.25	0.75	1.00
2021	0.25	0.75	1.00
2022	0.75	0.25	1.00
2023	0.75	0.25	1.00

F.4.4 Gross adopted estimates including expenses

NT WorkSafe self-insurers Estimates ($000s) at 30 June 2023 Accident year ending 30 June	30 June 2023 values (a)	Inflated values (b)	Inflated & discntd values (b)	Case estimates (c)	Ratio % (d)
2015 & earlier	0	0	0	0	-
2016	1	1	1	0	-
2017	1	1	1	0	-
2018	1	2	1	0	-
2019	42	48	44	25	168%
2020	316	364	330	249	127%
2021	387	427	407	193	200%
2022	535	593	562	189	283%
2023	858	959	900	141	610%
Total	**2,142**	**2,394**	**2,245**	**797**	**269%**

Note: (a) In 30 June 2023 values, includes superimposed inflation

(b) includes 6% claims handling expenses, inflation and discounting assumptions in Appendix B 1

(c) as at 30 June 2023 as provided by the self-insurers

(d) = (a) / (c)

F.4.5 Net outstanding claims provision

Estimates at 30 June 2023 ($000s) Accident year ending 30 Jun	Gross o/s liability (a)	Reinsurance recoveries (b)	Net o/s liability (c)	Claims handling expenses (d)	Net central estimate (e)	Risk margin (f)	Net Provision (g)
Total	2,118	0	2,118	127	2,245	1,123	3,368

Notes: (a) from table above

(b) (a) x 0%

(c) = (a) – (b)

(d) = (c) x 6%

(e) = (c) + (d)

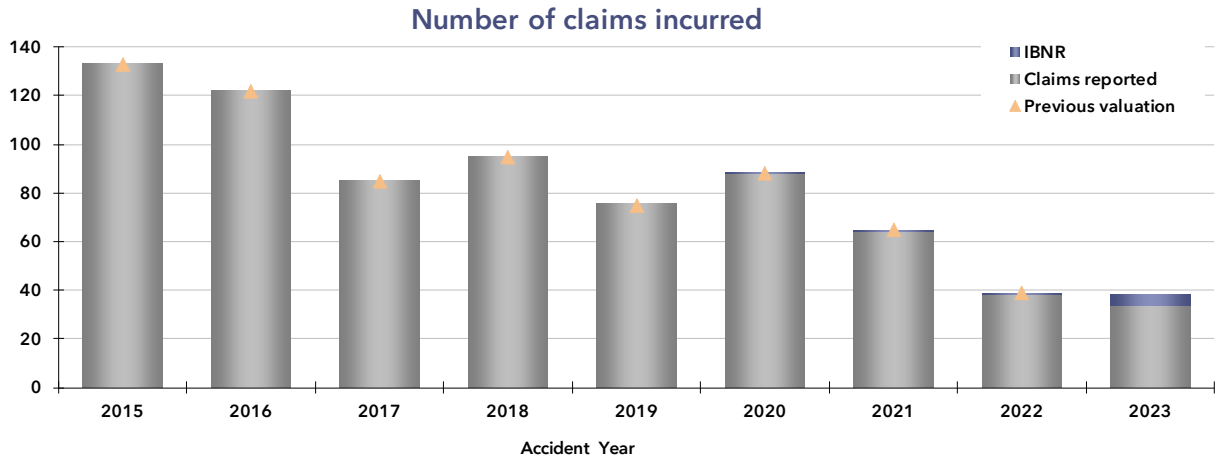
(f) = (e) x 50.0%

(g) = (e) + (f)

G Self-insurer claims statistics

G.1 Number of claims incurred

General decreasing trend from 2015 to 2023 at 38 claims

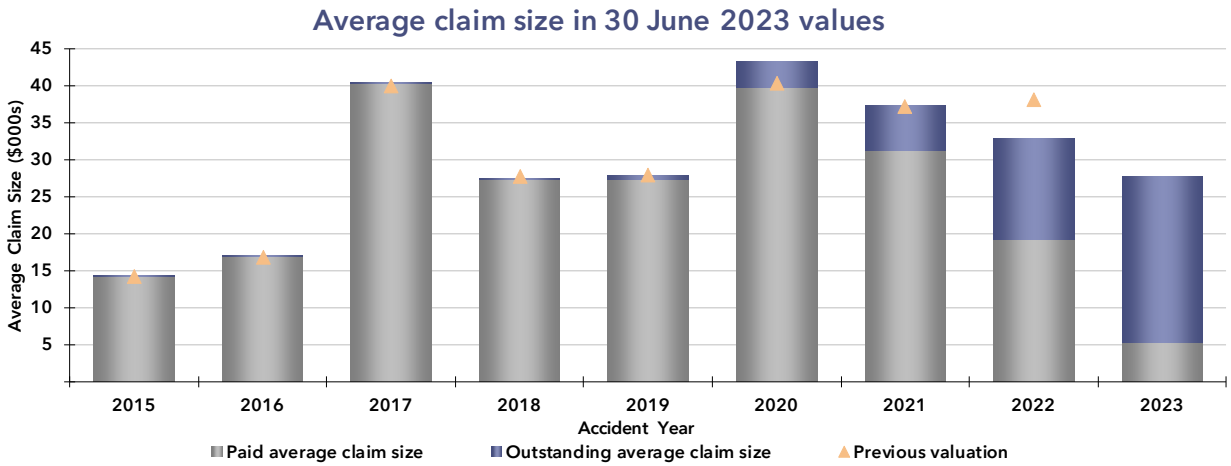


The main points to highlight from this chart are:

- Since the 133 claims in 2015, the number of claims reduced each year to 85 claims in 2017, which was significantly lower than all prior years shown
- From 2017 to 2021 the number of claims incurred has varied between 65 and 95
- For 2022, number of claims incurred decreased to 39. The significant decrease compared to 2021 and all prior accident years is partly due to Catholic Church becoming an insurer from 1 December 2020, so 2021 has five months of Catholic Church claims while 2022 has none.
- For 2023, the number of claims incurred is similar to 2022 at 38 claims, of which four are IBNR claims.
- The numbers of claims are similar to estimates at the previous valuation

G.2 Gross average claim size

2023 average claim size is estimated to be $27,712, which is lower than 2022



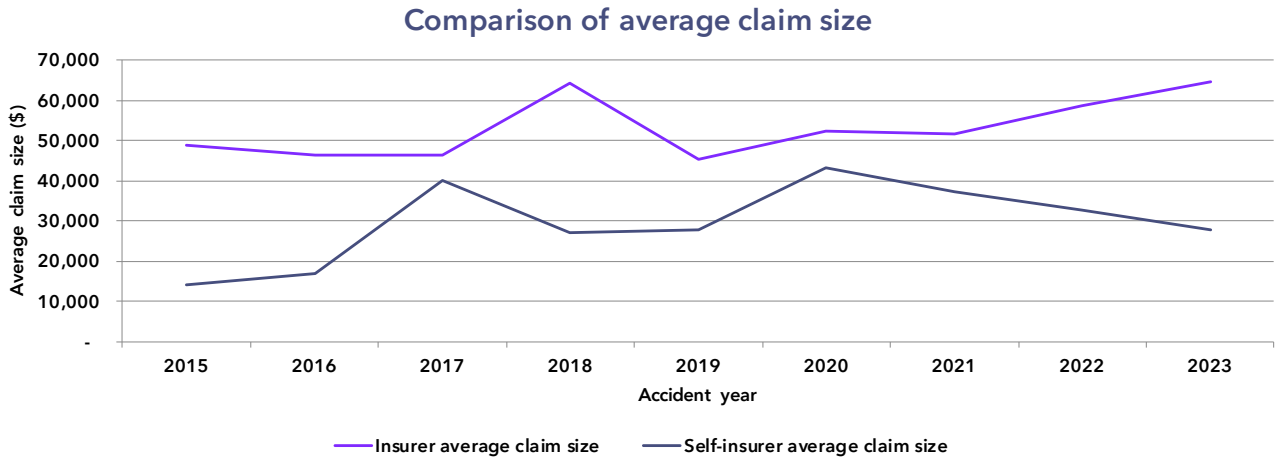
The average claim size has been volatile between accident years.

- For 2015 and 2016, the average claim size is lower than more recent years which reflects more smaller claims reported.
- The 2017 and 2020 accident years are higher than its surrounding years due to multiple medium claims (payments over $50,000) and one very large claim (totals estimates over $500,000).
- The 2021 to 2022 accident years are significantly higher than most previous accident years due to fewer small claims reported.
- The 2023 estimated average claim size is similar to 2018 and 2019 due to the average size of claims reported to date being lower than 2020 to 2022 at the same stage of development. There are no medium claims (payments over $50,000) reported to date.

The uncertainty about the future development means that the ultimate level and our estimates may differ from that projected for recent accident years. This is especially true for the 2022 and 2023 accident years, where a high proportion (42% and 81% respectively) of the average claim size consists of the uncertain future estimate.

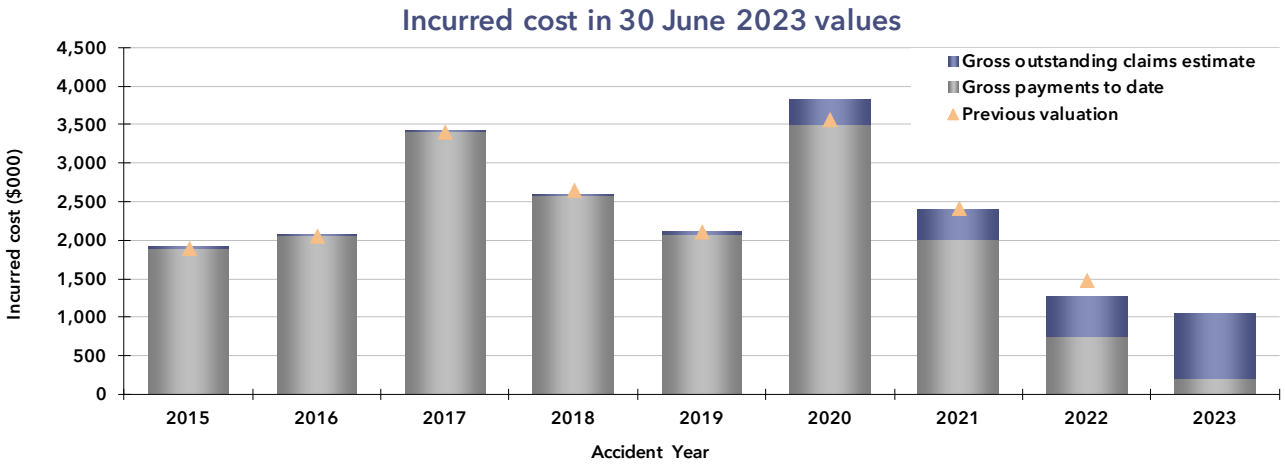
Compared to the previous valuation, the average claim size for 2015 to 2019 and 2021 are similar, 2020 is higher but 2022 is significantly lower than previously estimated. This is because of higher than expected development for 2020 and lower than expected development for 2022 with fewer large claims reported to date than other years at the same point in time.

The chart below compares the average claim size of self-insurers to insurers. The average claim size for self-insurers is consistently lower than insurers but was closer in 2020 and 2021 and seems to be diverging again in 2022 and 2023.



G.3 Incurred cost

2023 incurred cost is $1.1 million, which is lower than all other years, due to Catholic Church not being included for the full year



The incurred cost is the combination of the trends of the decreasing number of claims incurred and variable average claim size.

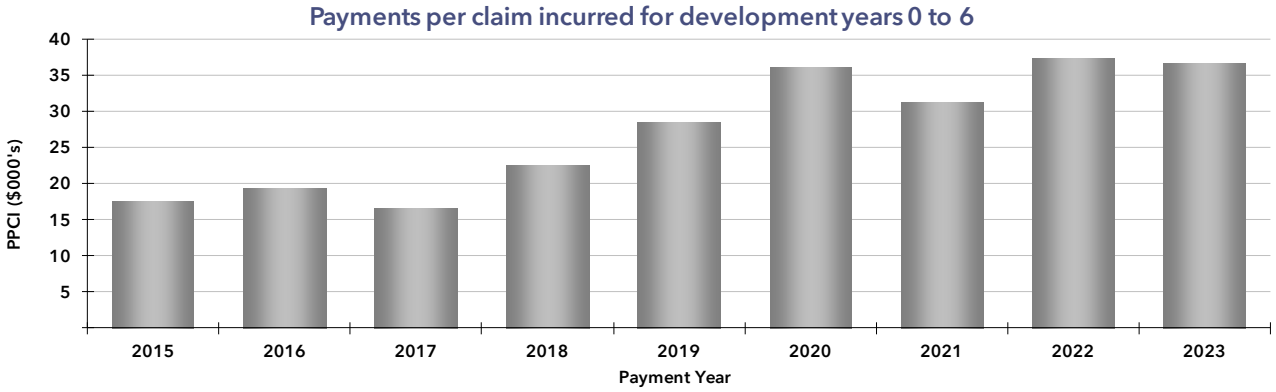
The incurred cost for 2023 is $1.1 million, which is $0.2 million (17%) lower than the 2022 accident year incurred cost of $1.3 million and lower than all other years due to the lower average claim size.

Compared to our previous valuation, there has been an increase in the incurred costs for the 2020 accident year due to higher than expected development and a significant decrease in the incurred costs for the 2022 accident year due to lower than expected claim development.

Over the period shown in the graph, the proportion outstanding increases from 0% of the total incurred cost for 2018 to 81% of the total incurred cost for 2023.

G.4 Payment per claim incurred

2015 to 2023 exhibits a broadly increasing trend



Payments per claim incurred for development years 0 to 6 exhibits an increasing trend, from $17,580 in the 2015 financial year to $36,002 in the 2020 financial year. The high in 2020 was due to very high payments for the 2017 accident year (DY3). 2021 was lower than 2020 but higher than 2019 and prior years. The 2022 and 2023 financial years are broadly in line with the 2020 payment year, with 2023 $732 (2%) lower than 2022.

H Insurer break-even premium rate

H.1 Calculation of discounted gross incurred cost

The following tables present the data and assumptions we have used to calculate the discounted gross incurred cost, which when combined with the actual expenses give a break-even premium to compare to the actual premium rates charged.

H.1.1 Actual claim payments

Accident Year	Claim payments ($000s) (a) for development year: 0	1	2	3	4	5	6	7	8	9	10	Total
2011	15,299	19,094	11,492	10,452	3,877	4,979	5,829	1,126	1,360	815	2,299	76,622
2012	16,950	22,397	9,748	9,393	5,211	5,054	2,473	2,160	1,337	1,383	4,654	80,760
2013	18,472	24,288	15,522	14,449	7,258	3,474	5,713	2,942	1,707	642	1,000	95,468
2014	19,209	25,133	15,471	12,743	8,432	5,423	2,868	1,067	409	753	0	91,507
2015	19,188	24,668	20,541	15,753	9,571	4,537	7,436	3,460	4,014	0	0	109,168
2016	21,196	30,605	19,268	11,979	5,934	3,665	1,987	5,844	0	0	0	100,477
2017	23,602	31,724	20,569	12,836	5,265	2,789	566	0	0	0	0	97,351
2018	26,881	43,842	24,068	16,214	13,834	4,578	0	0	0	0	0	129,416
2019	24,960	26,209	15,749	9,422	3,275	0	0	0	0	0	0	79,615
2020	22,627	25,836	12,613	8,466	0	0	0	0	0	0	0	69,543
2021	21,031	24,301	13,029	0	0	0	0	0	0	0	0	58,361
2022	21,928	27,550	0	0	0	0	0	0	0	0	0	49,479
2023	23,766	0	0	0	0	0	0	0	0	0	0	23,766

Notes: (a) from data extracted from the WIMS system as at 30 June 2023

Note that the data in the table presented above is in a different form to the claim payments data in Appendix C1. Each row in the table shows the payments relating to that specific accident year, i.e., development year 1 for 2012 shows the actual payments made in 2013 financial year in relation to incidents, which occurred in 2012. In the previously presented table, this same cell represented payments made in 2012 financial year for incidents, which occurred in 2011. It also comes from Form 4 which has slight differences to the WIMS data.

H.1.2 Historic one year forward rates

	One year forward rate for the year to 30 June 2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Forward rate	2.38%	0.03%	0.22%	0.97%	1.89%	1.63%	1.96%	2.47%	2.54%	2.79%	4.76%	4.48%	3.44%

These rates are the one year forward rate, projected from one year prior, e.g. the rate to 30 June 2023 is the one year forward rate from the Commonwealth Bond yield curve as at 30 June 2022.

H.1.3 Discounted claim payments

Accident Year	Claim payments ($000s) (a) for development year:										
	0	1	2	3	4	5	6	7	8	9	10	Total
2011	15,043	18,059	10,441	9,209	3,317	4,138	4,717	888	1,045	613	1,667	69,137
2012	16,583	20,945	8,797	8,189	4,391	4,126	1,959	1,659	1,000	1,010	3,228	71,887
2013	18,048	22,868	14,101	12,669	6,157	2,856	4,546	2,276	1,289	474	713	85,997
2014	18,946	24,146	14,482	11,651	7,543	4,740	2,461	902	341	612	0	85,822
2015	18,949	23,766	19,354	14,539	8,642	4,026	6,510	2,991	3,386	0	0	102,161
2016	20,939	29,578	18,247	11,102	5,407	3,295	1,765	5,067	0	0	0	95,399
2017	23,373	30,862	19,632	12,074	4,899	2,570	510	0	0	0	0	93,920
2018	26,664	42,735	23,158	15,458	13,081	4,244	0	0	0	0	0	125,342
2019	24,727	25,598	15,222	9,020	3,070	0	0	0	0	0	0	77,637
2020	22,518	25,559	12,416	8,196	0	0	0	0	0	0	0	68,689
2021	21,008	24,244	12,833	0	0	0	0	0	0	0	0	58,084
2022	21,925	27,220	0	0	0	0	0	0	0	0	0	49,145
2023	23,489	0	0	0	0	0	0	0	0	0	0	23,489

Notes: (a) payments from H1.1 above, discounted using the rates in H1.2

H.1.4 Discounted gross incurred cost

Underwriting year	Discounted gross claim payments (a) ($000s)	Discounted gross outstanding claims (b) ($000s)	Discounted gross incurred cost (c) ($000s)
2015	102,161	6,548	108,709
2016	95,399	7,634	103,034
2017	93,920	7,113	101,034
2018	125,342	17,429	142,770
2019	77,637	14,497	92,134
2020	68,689	23,388	92,077
2021	58,084	37,122	95,206
2022	49,145	55,389	104,535
2023	23,489	89,812	113,301

Notes: (a) from H1.3 above

(b) outstanding claims inflated/discounted from Appendix C4, discounted to the start of the underwriting year using rates in Appendix H1.2 above

(c) = (a) + (b)

H.2 Estimated historic break-even premium rate

	Calculated break even premium						Actual premium				
Accident year	Reported earned wages (a) ($000s)	Developed earned wages (b) ($000s)	Discounted gross incurred cost (c) ($000s)	Commission in financial year (d) ($000s)	Discounted other expenses in the fin year (e) ($000s)	Premium (f) ($000s)	Estimated premium rate (g)	Reported earned premium (h) ($000s)	Developed earned premium (i) ($000s)	Actual premium rate charged (j)	Difference (break even - actual)
2015	6,582,845	6,582,845	108,709	4,558	20,281	134,389	2.0%	136,816	136,816	2.1%	2,428
2016	6,833,594	6,833,594	103,034	4,163	20,036	128,011	1.9%	129,530	129,530	1.9%	1,519
2017	7,261,995	7,261,995	101,034	4,489	20,620	126,757	1.7%	130,733	130,733	1.8%	3,976
2018	7,254,718	7,254,718	142,770	5,534	22,576	171,574	2.4%	135,179	135,179	1.9%	-36,395
2019	6,824,479	6,824,479	92,134	4,701	20,791	118,178	1.7%	140,213	140,213	2.1%	22,035
2020	6,025,441	6,025,441	92,077	4,501	23,289	120,158	2.0%	126,481	126,481	2.1%	6,323
2021	6,177,331	6,150,575	95,206	4,727	27,297	127,300	2.1%	131,892	131,054	2.1%	3,754
2022	6,671,518	6,668,528	104,535	4,927	17,699	127,170	1.9%	151,372	149,842	2.2%	22,672
2023	7,294,206	7,562,081	113,301	6,465	30,022	150,669	2.0%	177,204	176,189	2.3%	25,520

Notes: (a) earned wages provided by insurers

(b) (a) x development factors in Appendix B7

(c) calculated in Appendix H1

(d) actual commission, from the consolidated Form A returns

(e) other expenses, from the consolidated Form A returns, discounted by half a year

(f) = (c) + (d) + (e) x (1+ one year historical interest rate) ^ (3/12) to allow for the fact that premiums are received 3 months after the commencement of the underwriting period

(g) = (f) / (b)

(h) earned premium, including earned but not yet reported premium provided by insurers

(i) (h) x development factors in Appendix B7

(j) = (i) / (b)

H.3 Calculation of break-even premium rate for 30 June 2023

H.3.1 Discounted incurred cost for 30 June 2023

We selected the number of incurred claims and average claim size for 30 June 2023 based on the recent experience and allowing for future inflation and superimposed inflation. The following table shows the number of incurred claims, claim frequency and average claim size over the last five years and our adopted values.

	Accident year 2023	2022	2021	2020	2019	Adopted
Number of claims incurred (a)	1,830	1,863	1,920	1,851	2,203	1,978
Claim frequency per $91,837 of wages (b)	2.2%	2.5%	2.7%	2.7%	2.8%	2.3%
Average claim size (in 30 June 2023 values) (c)	64,757	58,884	51,690	52,498	45,441	61,794

Notes: (a) The adopted number of claims incurred is based on the adopted claim frequency in (b) times the projected wages.

(b) The adopted claim frequency is a two year average

(c) The adopted average claim size is also a two year average, which includes the 2015 legislative amendments

Allowing for inflation of 3.6%, superimposed inflation of 1.2% and an inflation/discount factor to allow for the timing of payments of 0.9406 the discounted incurred cost for 30 June 2023 can be calculated as:

1,978 x [61,794 x (1 + 3.6%) x (1 + 1.2%) x 0.9406] = $120.6 million.

We have not made any specific allowance for the 2020 legislative amendments. Some of these changes are a reversal of the 2015 legislative amendments which weren't costed at the time as they were considered immaterial. The more material changes will mainly affect the government self-insurance claims which are out of scope for the report.

H.3.2 Expense loadings

See Appendix B3 for calculation of the expense loadings.

H.3.3 Projected break-even premium for 2023/24

Using the analysis above, the projected break-even premium rate for 30 June 2023 is:

Underwriting year	Actual wages (a) ($000s)	Discounted gross incurred cost (b) ($000s)	Expenses (c) ($000s)	Premium (d) ($000s)	Calculated premium rate (e)
2024	7,834,316	120,581	29,106	151,316	1.9%

Notes: (a) 2023 developed earned wages, inflated for one year's wage inflation at 3.6%

(b) from H3.1 above

(c) = (b) / (1 – commission rate (3.5%) – other expense rate (15.9%)) – (b)

(d) = (b) / (1 – commission rate (3.5%) – other expense rate (15.9%)) x (1 + interest rate (4.4%)) ^ (3/12) to allow for the fact that premiums are received 3 months after the commencement of the underwriting period

(e) = (d) / (a)

This break-even premium rate allows for the same timing aspects as the historic calculations of the break-even rate.

We considered the economic indicators in the 2023/24 Northern Territory budget report, in adopting the assumptions for the 2024 break-even premium rate.

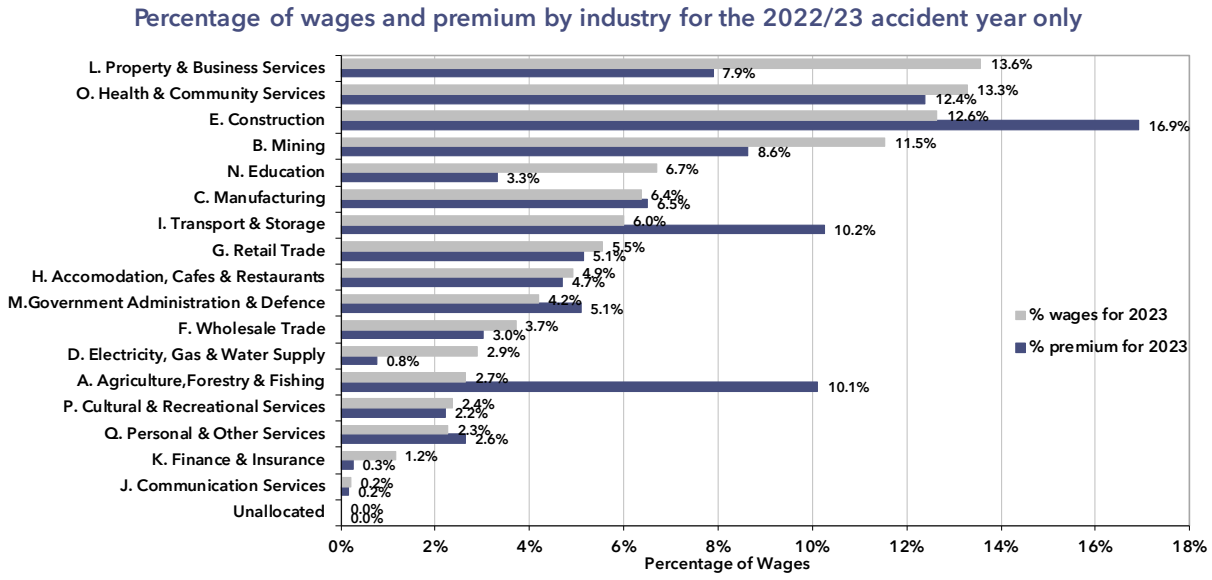
H.4 Historical rates by industry

The following tables show the historical premium rates charged by industry (excluding self-insurers) on an underwriting/earned year basis.

The below table does not use developed wages or premium and does not contain an allowance for earned but not yet raised premium.

Underwriting year basis						Difference
Premium rate by ANZSIC division	2019	2020	2021	2022	2023	2023 / 2022
A. Agriculture,Forestry & Fishing	6.97%	7.24%	7.38%	8.29%	9.23%	11.39%
B. Mining	1.62%	1.60%	1.57%	1.59%	1.81%	14.04%
C. Manufacturing	2.23%	2.12%	2.39%	2.40%	2.47%	3.17%
D. Electricity, Gas & Water Supply	0.72%	0.80%	0.68%	0.70%	0.64%	-8.44%
E. Construction	2.59%	2.95%	2.93%	3.09%	3.24%	4.76%
F. Wholesale Trade	1.97%	1.96%	1.84%	2.12%	1.97%	-7.05%
G. Retail Trade	1.88%	1.92%	1.96%	2.06%	2.25%	8.83%
H. Accomodation, Cafes & Restaurants	2.12%	2.15%	2.19%	2.11%	2.31%	9.82%
I. Transport & Storage	3.10%	3.13%	3.42%	3.62%	4.14%	14.32%
J. Communication Services	1.84%	1.70%	1.82%	1.74%	1.83%	5.14%
K. Finance & Insurance	0.54%	0.55%	0.50%	0.55%	0.54%	-1.08%
L. Property & Business Services	1.14%	1.14%	1.25%	1.36%	1.41%	3.19%
M.Government Administration & Defence	1.97%	2.45%	2.60%	2.80%	2.93%	4.66%
N. Education	0.99%	1.02%	1.01%	1.08%	1.20%	10.96%
O. Health & Community Services	2.16%	2.19%	2.15%	2.22%	2.26%	1.71%
P. Cultural & Recreational Services	2.40%	2.14%	2.20%	2.23%	2.27%	1.94%
Q. Personal & Other Services	2.45%	2.51%	2.37%	2.85%	2.82%	-1.14%
Unallocated	0.00%	-1.56%	0.00%	1.56%	0.00%	-150.00%
Total	2.06%	2.10%	2.13%	2.27%	2.42%	6.81%

The percentage of wages and premium by industry, on an underwriting year basis for the current year are:



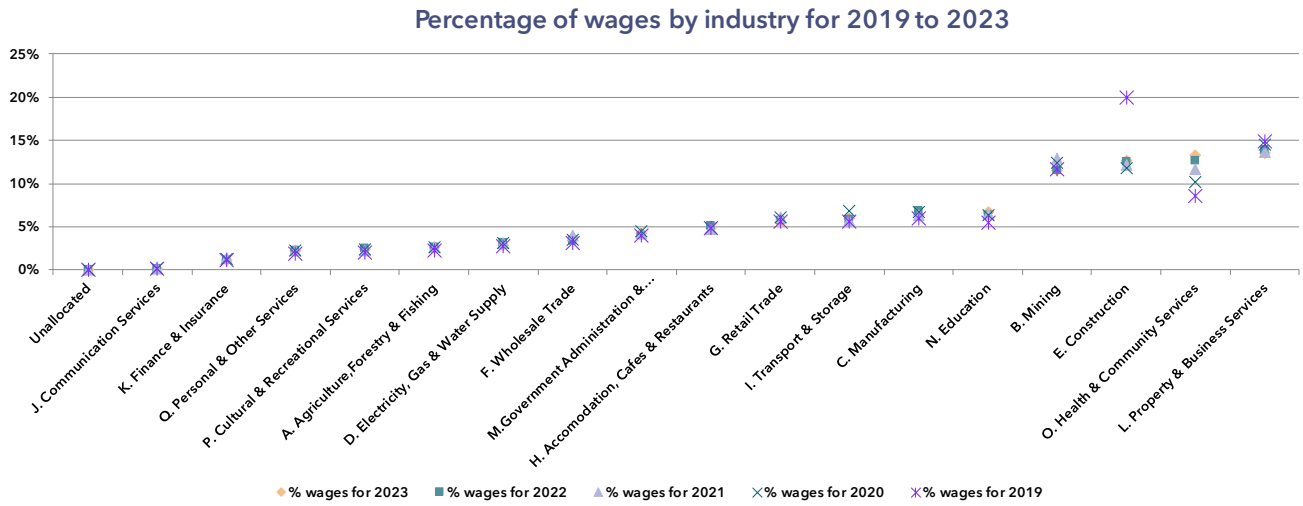
This shows that the divisions with significantly higher premium rate than the scheme average are:

- Agriculture, forestry and fishing
- Transport and storage
- Construction

Meanwhile the divisions with significantly lower premium rate than the scheme average are:

- Property and business services
- Education
- Mining
- Electricity, gas and water supply
- Health and Community Services
- Finance and Insurance

The chart below shows wages by ANZSIC division on an underwriting year basis.

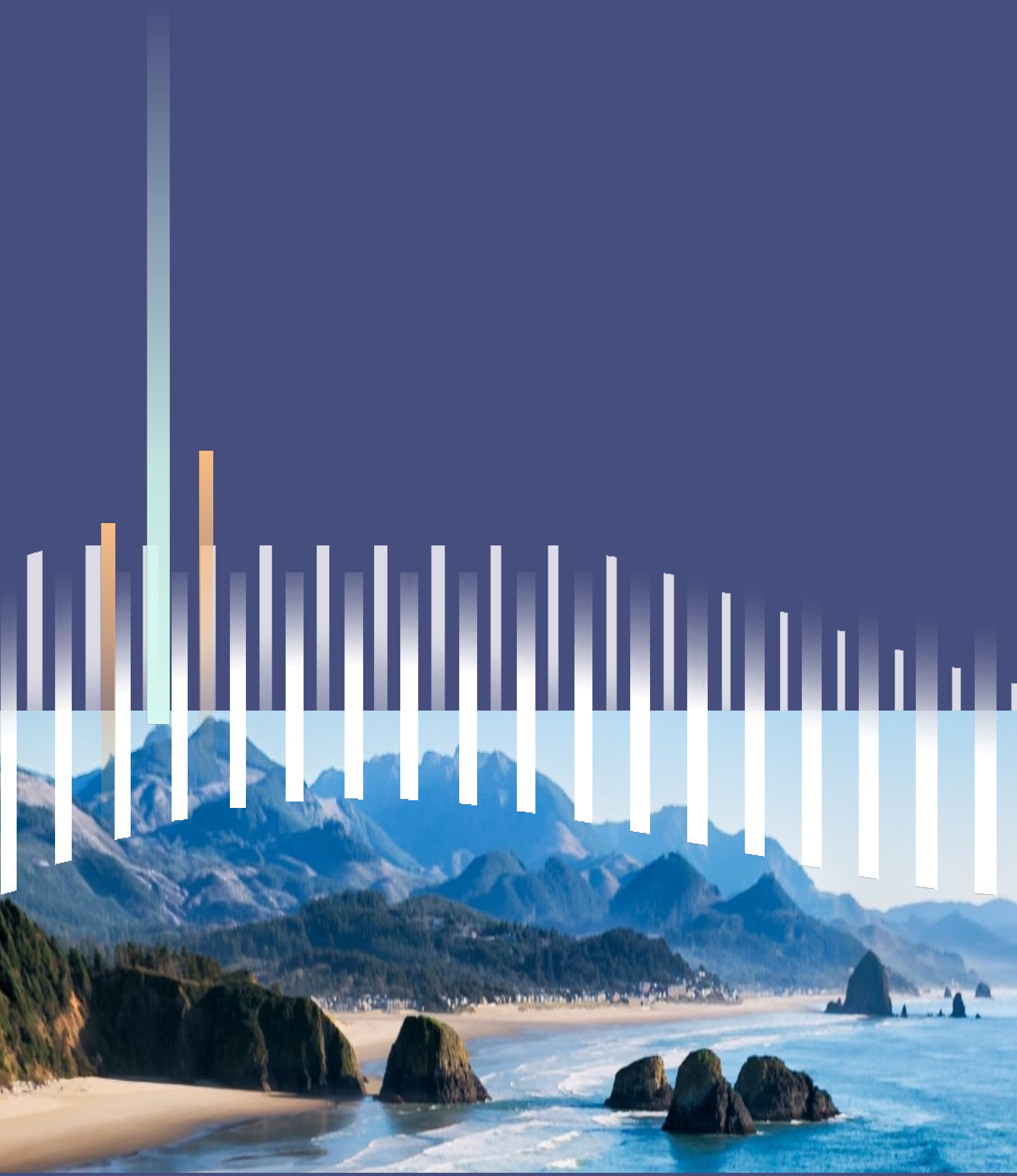


Presenting the information in this way acts to smooth the variation in wages by industry from one year to the next. Of note is the high in Construction to 2019 and reduction in 2020 onwards, as the Inpex project has moved into the production phase. In 2023, Property and Business Services is the largest division by wages. Health and Community Services have had an increasing trend in the proportion of total wages over 2019 to 2023.

I Glossary

Abbreviation	Description
AASB	Australian Accounting Standards Board
ABS	Australian Bureau of Statistics
Accident year	The financial year ending 30 June, in which the accident event leading to a claim occurs, irrespective of when the claim is reported, paid and finalised
APRA	Australian Prudential Regulation Authority
Break-even premium rate	This is the expected cost for policies, including an allowance for associated expenses and timing of premium payments. It is calculated as: Break-even premium rate = Discounted incurred cost / (1 – commission rate – other expense rate) x (1 + interest rate) ^ 3 / 12
Central estimate	Unbiased actuarial estimate, which has 50% probability of being sufficient. It is the median of the range of possible outcomes. The central estimate is inflated and discounted and includes claims handling expenses (unless where specified) and does not include a risk margin
Development year	The number of completed years since the end of the accident year. Development year zero refers to the financial year ending 30 June in which the accident event occurs. Development year is also abbreviated to DY in this report.
EBNYR premium	Earned but not yet raised premium. The earned but not yet raised premium is the aggregate of the burner policy premium adjustments where the estimated claims experience suggests that either more premium will need to be collected or some premium will be refunded.
Funding ratio	The funding ratio is measuring the liabilities held by the insurers or self-insurers (the notional assets) compared to the aggregate outstanding claims liability calculated by the scheme actuary. The funding ratio is as defined by the Comparative Monitoring Committee. For the insurers this is calculated as: $\frac{\text{inflated and discounted provision (including risk margin)}}{\text{inflated and discounted central estimate (excluding risk margin)}}$ For the self-insurers this is calculated as: $\frac{\text{bank guarantee provision (1.5 x central estimate)}}{\text{inflated and discounted central estimate (excluding risk margin)}}$
Inflated and discounted values	The estimates in current values are inflated to the dollar values in the estimated future year of payment. These values are discounted to 30 June 2022 values to allow for future investment income that will be earned until the claim is paid. The inflation and discount rates are outlined in Appendix B1.

Abbreviation	Description
NT	Northern Territory
Provision	The central estimate plus the risk margin.
Risk margin	The margin added to the central estimate to increase its level of adequacy to above 50%.
Risk premium	The risk premium is an estimate of the pure risk cost of claims and does not include allowance for expenses or margins. Risk Premium = estimated incurred cost of the risk covered i.e., of the claims with dates of occurrence in the risk/cover period =number of claims x average claim size



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