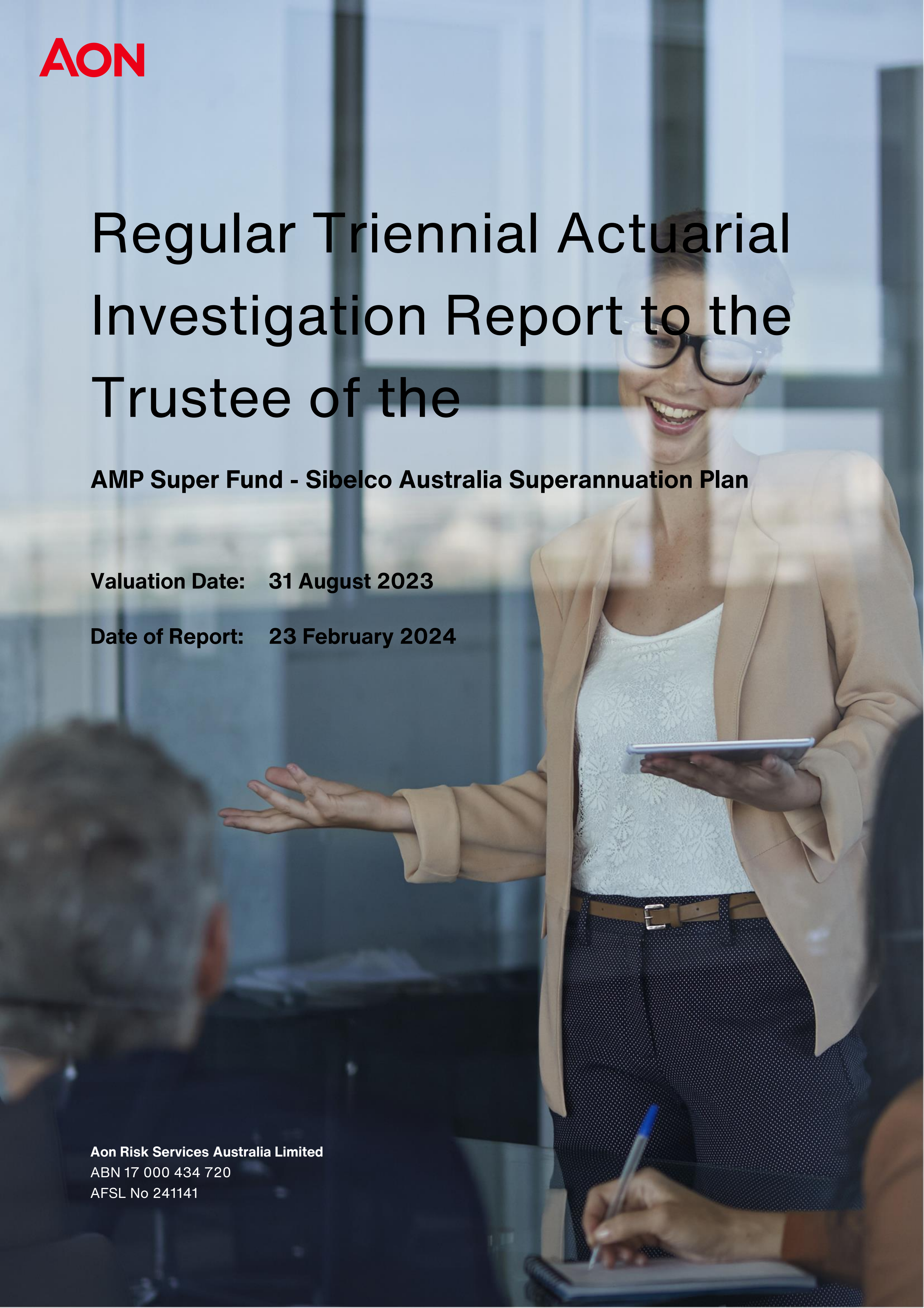

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Regular Triennial Actuarial Investigation Report to the Trustee of the

AMP Super Fund - Sibelco Australia Superannuation Plan

Valuation Date: 31 August 2023

Date of Report: 23 February 2024

Aon Risk Services Australia Limited
ABN 17 000 434 720
AFSL No 241141

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Executive Summary

Superannuation regulations and the Trust Deed of the AMP Super Fund - Sibelco Australia Superannuation Plan (the Plan) require that the Plan undergo a regular triennial actuarial investigation. This report has been prepared in order to comply with these provisions.

The sponsor of the Plan is Sibelco Australia Pty Limited (the Employer) and the Trustee is N.M. Superannuation Proprietary Limited (the Trustee).

Financial Condition

A snapshot of the financial condition of the Plan as at 31 August 2023 is set out below.

	Defined Benefits only	**Total Plan**	**Comments**
Vested Benefits Index	108.4%	105.0%	The Plan remains in a satisfactory financial position. The Plan's Vested Benefit Index for Defined Benefits is above the Shortfall Limit of 96.0%.
Actuarial Value of Accrued Benefits Index	98.6%	99.2%	The Plan remains in an inadequate financial position. The Plan had a deficit on this basis of $55,812.
Minimum Requisite Benefits Index	n/a^	100.0%	The Plan was solvent in relation to its Minimum Requisite Benefits.

^There is no Minimum Requisite Benefits in respect of pensioner members.

There is also a high degree of probability that the five pensions currently in payment will be able to be paid as required under the Plan's governing rules. This statement has been made considering the Plan's earnings to 19 February 2024. This statement is made in accordance with Superannuation Prudential Standard (SPS) 160, SIS Regulation 9.31(1) and Professional Standard 410 issued by the Institute of Actuaries of Australia.

See Sections 4 and 5 for more information on the financial condition of the Plan.

Significant Changes Since the Prior Regular Triennial Actuarial Investigation

The return on Plan assets over the period was higher than expected due to good performance of investment markets over the period. This has had a significant impact on the value of Plan Assets and therefore, in isolation, on the funding position.

Employer Contribution Recommendations

I recommend that the Employer pays contributions to the Plan at the amounts set out in the table below:

Category of membership	Contributions
Pensioner members	Nil monthly contributions
Accumulation members	SG contributions (based on Ordinary Time Earnings)

These amounts are the same as those currently being paid.

The Employer contributions in respect of Accumulation members must be paid by the 28th day of the month following the quarter end or required date as determined by legislation.

Please refer to Section 4 for details.

Shortfall Limit Recommendations

I have reviewed the Shortfall Limit of 96.0 percent and confirm that, in my view, it remains appropriate.

Please refer to Section 5 for details.

Insurance Recommendations

I have reviewed the benefits provided to accumulation members that exceed their account balances that are fully insured and confirm that, in my view, they remain appropriate and the current insurance arrangement should be maintained.

Please refer to Section 6 for details.

Investment Recommendations

The pension benefits are not impacted by the investment return. As a result, the financial position of the Plan and contribution requirements are particularly sensitive to the investment return achieved on the Plan's assets.

Note that regular pension rebalancing is required to ensure that assets supporting pension liabilities are maintained at a similar level, which will be reviewed each year considering experience versus assumptions (particularly investment returns, pension increase rate and longevity or mortality of pensioners and their spouses, if applicable) and the funding position. After considering the financial position at the financial date and investment returns up to 19 February 2024, we recommend that all defined benefit assets for the Plan remain in the Future Directions Balanced non-taxed investment as the assets are approximately equal to the current pension liabilities and present value of expected future expenses.

In my opinion, the retention of the current investment strategy is appropriate to meet the long-term pension liabilities of the Plan, being the ongoing income streams of its pension members and their spouses, where reversionary.

Given the satisfactory financial position of the Plan, the Employer may prefer to have the Defined Benefit assets to be invested in a less growth-orientated investment option in order to reduce the fluctuations of assets in volatile investment markets. This would increase the long-term contributions required to meet pension benefits and expenses.

We can assist the Trustee and Employer to consider the financial impact of a change in investment strategy.

For more information refer to Appendix C.

Crediting Rate Recommendations

I have reviewed the crediting rate policy for the Plan and confirm that, in my view, it remains appropriate and should be maintained. For more information refer to Appendix C.

Monitoring Recommendations

I have reviewed the current practice of carrying out the actuarial investigation on an annual basis and confirm that, in my view, it remains appropriate given the Australian Prudential Regulation Authority's (APRA's) requirements for plans that pay pensions.

Actuarial Assumptions

There have been changes to the actuarial assumptions since the previous regular triennial actuarial investigation. For more information refer to Section 3.

Material Risks

I have reviewed the material risks of the Plan and confirm that, in my view, there are no unusual significant risks that the Trustee needs to be aware of.

Please refer to Section 8 for details.

Next Actuarial Investigation

The next regular triennial actuarial investigation of the Plan should be carried out with an effective date of 31 August 2026. A regular annual actuarial investigation will be carried out at each 31 August between triennial investigations as the Plan pays pension benefits.

An interim actuarial investigation may need to be carried out at an earlier date if one or more of the notifiable events within the Funding and Solvency Certificate occur prior to that date as advised by the Trustee/Employer (unless, after reviewing the details of a specific event which would otherwise be classified as a notifiable event, the actuary advises the Trustee in writing that such an event does not constitute a notifiable event).

Disclaimer

The calculations provided in this report are based on a number of assumptions. The assumptions used are best estimates only and may not be borne out in practice. It is therefore important to review the calculations in the light of actual experience and obtain regular updates.

Saffron Sweeney

Saffron Sweeney
Fellow of the Institute of Actuaries of Australia
23 February 2024

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Section 1 – Introduction

Purpose of the Regular Triennial Actuarial Investigation

The reasons for this regular triennial actuarial investigation are:

- to satisfy the requirements of Superannuation Prudential Standard (SPS) 160 which requires a regular actuarial investigation to be carried out once every three years;
- to review the Plan's financial position as at 31 August 2023 (the Effective Date);
- to examine the Plan's immediate solvency and funding indices;
- to recommend appropriate Employer contribution amounts so that the Plan remains in a satisfactory financial position;
- to review the basis for insuring death and disability benefits; and
- to comment on any aspect of the Plan that may assist with improving its objectives.

The main provisions of the Plan that relate to benefits and contributions are set out in Appendix A.

Name of Actuary

This regular triennial actuarial investigation was carried out as at 31 August 2023 by Saffron Sweeney, of Aon Risk Services Australia Limited, Fellow of the Institute of Actuaries of Australia. The previous regular triennial actuarial investigation was also completed by Saffron Sweeney, as at 31 August 2020. The results are shown in the report dated 25 February 2021.

Compliance with the Standards of the Institute of Actuaries of Australia

This report satisfies the requirements of the Professional Standards (including Professional Standards 400, 402, 404 and 410) and Practice Guidelines 1, 499.08 and 499.09 published by the Institute of Actuaries of Australia and Superannuation Prudential Standard (SPS) 160.

Reliance and Limitations in the Report

There have been no restrictions or limitations placed on me in providing the recommendations in this report.

This report is intended for the sole use of the Trustee and Employer for the purposes set out in this report. It may not be appropriate for other business purposes. Reliance on information contained in this report by anyone for other reasons than the intended purpose, puts the relying entity at risk of being misled because of confusion or failure to understand applicable assumptions, methodologies, or limitations of the report's conclusions. Accordingly, no person or entity, including the Trustee, should base any representations or warranties in any business agreement on any statements or conclusions contained in this report without the written consent of Aon Risk Services Australia Limited ABN 17 000 434 720 AFSL No 241141 (Aon).

Previous Investigation Results

The results of the previous investigations were as follows:

	Regular Triennial Actuarial Investigation as at 31 August 2020	**Regular Annual Actuarial Investigation as at 31 August 2021**	**Regular Annual Actuarial Investigation as at 31 August 2022**
A deficit of Assets over the Actuarial Value of Accrued Benefits	($124,976)	$467,404	($223,395)
An excess of Assets over the Vested Benefits	$83,486	$677,767	$163,552
Summary of the recommended Employer contribution for DB members	Lump sum contributions to the plan of $14,545.50 per month from 1 September 2020 to 31 March 2021 and nil monthly contributions from 1 April 2021	Nil monthly contributions	Nil monthly contributions

Contributions have been paid in accordance with the above recommendations since the last regular triennial actuarial investigation to the date of this report.

Section 2 – The Plan's Experience

This section considers the assumptions used in the previous regular triennial actuarial investigation as at 31 August 2020 and the experience of the Plan relative to these assumptions.

The main factors affecting the Plan's financial position during the period since the previous triennial actuarial investigation as at 31 August 2020 were as follows:

	Assumptions at the previous triennial investigation	**Plan Experience**	**Impact on the financial position of the Plan (when considered in isolation)**
Investment Returns[1]	5.6% p.a.	6.2% p.a.	Favourable effect: The Pensioner assets increased at a higher rate than assumed.
		Below the equivalent median return of funds with a similar investment strategy[2] which was 6.3% p.a. (taxed earnings).	The Plan earned lower returns than other funds with a similar investment mix.
Pension Increases	2.3% p.a.	[redacted]	Unfavourable effect: The Defined Benefit pension liabilities increased at a greater rate than expected.
Contributions	No further accrual of benefits	Recommended lump sum contributions were paid	Favourable effect: The Defined Benefit assets increased.
Expenses	Actuarial fees $13,485 p.a. with 2.5% p.a. indexation	Actuarial fees and asset admin rebate averaged $11,820.67 p.a.	Favourable effect: The expenses were lower than assumed.

[1]net of investment expenses.

[2]based on the Rainmaker Workplace Super Balanced survey issued for the period ending 31 August 2023.

The other factors affecting the Plan's financial position during the period since the previous regular triennial actuarial investigation include:

- Membership movements – Pensioners: There were no deaths since the previous regular triennial actuarial investigation. Since the mortality assumptions assume a proportion of the membership will leave the Plan due to death, the fact that pension members and their spouses have survived has had an unfavorable financial impact on the Plan.

The overall experience of the Plan during the regular triennial actuarial investigation period has had a positive effect on its financial position.

Section 3 – Assumptions

As part of this regular triennial actuarial investigation, I have analysed the method and assumptions used in the previous regular triennial actuarial investigation as at 31 August 2020. Where appropriate I have maintained these methods and assumptions, however some have changed in light of the experience discussed in Section 2 of this report and after consideration of changes in market expectations. The actuarial method used is described in Appendix D.

Interest/Salary Differential

Pension Members

The most significant financial assumptions used for Pension members are the rate of future investment returns and the rate of future pension increases. These rates must also be considered together because of their economic interdependence in the medium to long-term.

For this investigation I have used an Investment Return/Pension Increase Differential assumption as shown in the table below which is less conservative and the overall impact of these assumptions, in isolation to all others, is that the Actuarial Value of Accrued Benefits has decreased.

	Net investment return (p.a.)	Pension Increase rate (p.a.)	Differential (p.a.)
Assumption as at 31 August 2020	5.60%	2.30%	3.30%
Assumption as at 31 August 2023	6.30%	2.50%	3.80%

These assumptions have taken into account the long-term outlook of economic conditions, in particular:

- The investment return assumption was derived using long-term assumptions for each asset class as determined by Aon's global investment team, multiplied by the strategic asset allocation of the Defined Benefit related assets and allowing for correlations of investment returns between asset classes and investment fees;
- We expect that inflation will return to the RBA target of 2 percent p.a. to 3 percent p.a. We have assumed CPI will be 2.50 percent p.a.;
- The long-term outlook for investment returns being somewhat higher than those earned in the last three years; and
- The pension increase rate assumption was chosen after considering the CPI increases for the 3 years ending 31 August 2023 as well as the long-term CPI as above.

Demographic Assumptions

There have been no changes to the assumption for pensioner mortality since the last regular triennial actuarial investigation and therefore this has no impact on the Actuarial Value of Accrued Benefits.

Specimen rates for pensioner members which have been used in this regular annual actuarial investigation are shown in the following table:

Age	Rates 2023*	
	Males	**Females**
70	1.27%	0.77%
80	3.69%	2.43%
90	12.32%	9.45%
100	27.09%	26.35%

*Australian Life Tables (ALT) 2015-2017 allowing for future mortality improvements based on the 25-year improvement factors and age rated down by 2 years.

Expenses and Insurance Premiums

The operating expenses Plan are met from the Assets of the Plan, and as such, the regular triennial actuarial investigation requires a specific allowance to be made to meet these costs. With only pensioner defined benefit members remaining, the present value of expected future expenses is included in the Actuarial Value of Accrued Benefits (but not the Vested Benefits) as the benefits are all 'past benefits' and therefore is preferred that expenses relation to meeting those liabilities are funded in advance. They are assumed in this investigation to be as follows:

Actuarial and asset administration fees expected over the next three years	$27,094 p.a.
Fees are assumed to increase at	2.5 percent p.a.

The assumption at the last regular triennial actuarial investigation was $13,485 p.a. increasing at 2.5 percent p.a.

We note that the asset fee rebate ceased in September 2021 and a new asset administration fee of 0.24 percent p.a. of Plan assets has applied since 1 October 2021 and this has caused the expense assumption to increase substantially since the previous regular triennial investigation. This was a change from the previous practice of implicit asset administration fees which were within unit price returns.

There has been an increase in the expected expenses, and this has resulted in an increase in the Actuarial Value of Accrued Benefits.

Accumulation members' expenses and insurance premiums for Death/TPD and SCI insurance are deducted from members' accounts, therefore no assumption is required for this or paid by the Employer and therefore the assumptions above do not incorporate the cost associated with Accumulation members' expenses and insurance premiums.

Tax

There have been no changes to our assumptions regarding tax since the last regular triennial actuarial investigation.

As the Plan's assets are all pension assets, no investment tax is expected to be paid. We assume that all relevant taxes relevant to Accumulation members will be deducted from their account balances and have no financial impact on the Plan.

Additional Assumptions Relating to Pensions

There are a number of additional assumptions that relate to pension liabilities and assets. They include:

- The liabilities for the current pension members allow for reversions (where applicable) based on actual spouse data.
- Remarriage, separation or divorce – As at 31 August 2023 there are five members with pensions, three of whom have 50 percent spouse reversions and their spouses are alive. We have assumed that there will be no separation or divorce. We have assumed that these pensioners will not remarry. Note that there are two members with single life pensions.

Overall Effect of Changes in Assumptions

Overall the changes have decreased the expected cost of providing Defined Benefits to the members of the Plan.

Section 4 – Actuarial Value of Accrued Benefits

I have adopted the actuarial method and assumptions described in Section 3 and in Appendix D of this report to determine the present value of past liabilities in relation to Defined Benefit members. The results of the regular triennial actuarial investigation are detailed in the following table and both the assets and liabilities include the Accumulation member account balances.

Actuarial Value of Accrued Benefits (past service)	**($)**
Pensioner liabilities	
• Pensioner benefit payments	[redacted]
• Future defined benefit expenses	[redacted]
• *Total Pensioner Liabilities*	[redacted]
Total of Defined Benefit related liabilities	[redacted]
Accounts for Accumulation members*	[redacted]
Actuarial Value of Accrued Benefits	[redacted]
Assets*	[redacted]
Surplus/(Deficit)	**(55,812)**

*Assets for Accumulation members have been set equal to the active Accumulation members' benefits.

In order to meet the deficit, the required Employer contribution, if any, is the Net Unfunded Liability grossed-up for contributions tax.

Analysis of Changes in Financial Position Since the Last Regular Triennial Actuarial Investigation

The following table quantifies the various impacts on the financial position of the Plan since the last regular triennial actuarial investigation as at 31 August 2020. These figures give an indication of the impact of the factors that affect the final regular triennial actuarial investigation result. As there are yearly funding calculations performed, these items have been determined in each year between triennial investigations and added to provide the 3 years' worth of movements.

	$(000's)
Previous surplus/(deficit)	**(125)**
Interest on surplus/(deficit)[1]	(45)
Investment gains/(losses)[2]	123
Employer contributions paid at a higher/(lower) rate than long-term rate[3]	90
Expense gains/(losses)[4]	9
Change in basis gains/(losses)[5]	19
Pension indexation gains/(losses)[6]	(23)
Pensioner mortality gains/(strain)[7]	(78)
Miscellaneous	(26)
Surplus/(deficit) as at the valuation date	**(56)**

[1] Interest on deficit over the period.

[2]An investment gain occurs when investment earnings are higher than assumed.

[3]A contribution gain occurs when employer contributions are paid where there are no accruing defined benefit members.

[4]An expense gain occurs when expenses are less than assumed.

[5]A gain from a change of basis occurs when the overall set of assumptions becomes less conservative.

[6]A pension indexation loss occurs when pension indexation is at a higher rate than assumed.

[7]A pensioner mortality strain occurs when pensioners live longer than assumed.

Managing a Deficit of Assets

Total assets are less than the Actuarial Value of Accrued Benefits by $55,812. This is equivalent to 1.4 percent of Defined Benefit liabilities (i.e., excluding accumulation benefits).

The deficit is due to the provision for the total future expenses of the Plan being included in the Actuarial Value of Accrued Benefits. We note that the Actuarial Value of Accrued Benefits basis is a more conservative measure of liability than Vested Benefits as it includes provision for future expenses. While 100 percent funding is desirable, I do not consider it as a requirement for meeting benefits purposes as long as expenses can be paid when they fall due as well as meeting pension benefits

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Section 5 – Immediate Solvency and Funding Indices

Immediate Tests on the Adequacy of the Assets

An important objective of this regular triennial actuarial investigation is the measurement of the funding of expected member benefits in respect of their service up to the valuation date.

- Assets: I have taken the fair value of the net assets provided by the Plan administrator, based on the AMP Super Fund general ledger as the value of assets for Defined Benefit members and the value of Accumulation members' benefits for as the value of assets Accumulation members for the purpose of this regular triennial actuarial investigation. The financial statements of the AMP Super Fund as at 30 June 2023 were audited and signed on 21 September 2023. The assets are net of any amount held to meet the Operational Risk Financial Requirement (ORFR). The assets are discussed further in Appendix C.
- Liabilities: Appendix D contains a summary of the method used in the regular triennial actuarial investigation to determine the liabilities of the Plan.

The indices described here have been used to assess whether the Assets of the Plan are sufficient to ensure its ongoing solvency and to measure the changes in these indices since the last regular triennial actuarial investigation.

The table below shows the relevant indices calculated by dividing the level of assets by the total of the relevant benefit based on the results of this regular triennial actuarial investigation and the previous regular triennial actuarial investigation.

	31 August 2020			31 August 2023			
	Amount ($)	Index[1]	DB Index[2]	Amount ($)	Index[1]	DB Index[2]	
Minimum Requisite Benefits[3]	[redacted]	100.0%	n/a	[redacted]	100.0%	n/a	A
Vested Benefits	[redacted]	100.8%	102.1%	[redacted]	105.0%	108.4%	A
Actuarial Value of Accrued Benefits	[redacted]	98.9%	97.0%	[redacted]	99.2%	98.6%	A
Accumulation Benefits	[redacted]			[redacted]			B
Assets[4]	[redacted]			[redacted]			C

[1]Index is C/A.

[2]DB Index is (C – B)/(A – B), i.e. the index excluding accumulation benefits.

[3]The Minimum Requisite Benefits exclude pensioner members' liabilities. As at 31 August 2023 and 31 August 2020 the pensioner liabilities were $3,713,802 and $3,912,506 respectively (excluding expected future expenses).

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[4] Assets for Accumulation members have been set equal to the active Accumulation members' benefits.

Financial Indices for Pension members

The following table summarises the Vested Benefits, Actuarial Value of Accrued Benefit and assets of the pensioners. Note that the assets and liabilities below were also included in the results shown on the previous page and the remainder of the report.

	31 August 2020		31 August 2023	
	Amount ($)	**Index**	**Amount ($)**	**Index**
Vested Benefits	[redacted]	102.1%	[redacted]	108.4%
Actuarial Value of Accrued Benefits^	[redacted]	97.0%	[redacted]	98.6%
Assets (assuming the pension was funded)	[redacted]		[redacted]	

^ The excess over the Vested Benefits amount is the liability for the present value of expected future expenses.

Note that regular pension rebalancing is required to ensure that assets supporting pension liabilities are maintained at a similar level, which will be reviewed each year considering experience versus assumptions (particularly investment returns, pension increase rate and longevity or mortality of pensioners and their spouses, if applicable) and the funding position.

After considering the financial position at the financial date and investment returns up to 19 February 2024, we recommend that all defined benefit assets for the Plan remain in the Future Directions Balanced non-taxed investment as the assets are approximately equal to the current pension liabilities and present value of expected future expenses.

Vested Benefits Index

Vested Benefits are the benefits that members are entitled to receive upon voluntary withdrawal from the Plan or where the members have already terminated employment and are receiving Defined Benefit pensions, the value of those pensions (i.e. the present value of projected pension benefits) are also included.

The Vested Benefits Index provides a measure of the Plan's ability to meet its minimum obligations to all members if they had withdrawn from the Plan on the valuation date.

To ensure that the Plan is in a satisfactory financial position, it is essential that the Vested Benefits Index is kept above 100 percent. The Vested Benefits Index was at a satisfactory level at the valuation date.

Shortfall Limit

In accordance with SPS 160, the Trustee has set a Shortfall Limit of 96.0 percent. This is the extent to which the Trustee considers the Plan can be underfunded (on the basis that assets are insufficient to meet all members' Vested Benefits) but retain a reasonable expectation of returning to a funded position within a year, solely due to a correction to temporary negative market fluctuations in the value of the Plan assets.

This Shortfall Limit is to be compared to the Defined Benefit Vested Benefits Index i.e., the ratio of Defined Benefit assets and Defined Benefit Vested Benefit liabilities. Accumulation members' benefits are excluded from the assets and liabilities.

The Defined Benefit Vested Benefit Index at 31 August 2023 was 108.4 percent. Therefore, the Plan has not fallen below the Shortfall Limit at the valuation date.

I have reviewed the Shortfall Limit of 96.0 percent and confirm that, in my view, it remains appropriate.

As the Shortfall Limit is determined with reference to the proportion of growth-oriented assets (as well as pension related benefits) the Shortfall Limit will need to be recalculated if the Trustee changes the investment strategy of Defined Benefit related assets.

Minimum Requisite Benefits Index

Minimum Requisite Benefits (MRBs) are the minimum benefits that members are entitled to under the Superannuation Guarantee legislation. Where the members have already terminated employment and are receiving Defined Benefit pensions, the value of those pensions are not included as the MRB test on the benefit had been checked at termination. The Plan is 'solvent' if the net realisable value of the Assets of the Plan exceeds the MRB of all members of the Plan.

The Minimum Requisite Benefits Index provides a measure of the Plan's ability to meet its minimum Superannuation Guarantee obligations to all active members if they had withdrawn from the Plan on the valuation date.

The Minimum Requisite Benefits Index was kept above 100 percent and therefore the Plan was solvent at the valuation date.

Actuarial Value of Accrued Benefits Index

The valuation results shown in Section 4 of this report disclose the Actuarial Value of Accrued Benefits, also known as the Past Service Liability. This is not the same as the figure calculated for AASB1056 purposes. This amount constitutes the "value of the liabilities in respect of accrued benefits" as defined in Division 9.5 of the Superannuation Industry (Supervision) (SIS) Regulations and has been calculated in accordance with Professional Standard 402 issued by the Institute of Actuaries of Australia.

The Actuarial Value of Accrued Benefits Index provides a measure of the Plan's ability to meet its benefit obligations to all members of the Plan based on membership to the valuation date. Where the members have already terminated employment and are receiving Defined Benefit pensions, the value of those pensions (i.e. the present value of projected pension benefits) is also included. This allows for future expenses for Pension members.

The minimum desirable range for this index is 100 to 105 percent which allows for possible variations in asset values. The index was at an inadequate level at the valuation date. While 100 percent funding is desirable, I do not consider it is a requirement for meeting benefits purposes, as long as expenses can be paid when they fall due as well as meeting pension benefits.

Note that the Trustee has determined to use an approximate method for the AASB1056 Defined Benefit member liabilities to be disclosed in the AMP Super Fund's financial statements. The AMP Super Fund's financial reporting period is 1 July to 30 June each year.

Termination of the Plan

In the event of the termination of the Plan, all assets available at that time, net of accruals and expenses, would be distributed to members based on the priority listed in Section 1.12 of the Trust Deed in the following order:

a) Benefits payable for former members and beneficiaries

b) Vested Benefits of current members

c) Additional benefits having regard to members' accrued benefits

Any excess assets may be paid in a proportionate amount to members (both divisions), former members and the Employer (Unimin) as the Trustee determines.

Transferring Pensioner Liability to a Third Party

We have not provided the value of pension benefits in the above tables on an equivalent market value basis (that is, the amount determined as being required to be paid to a third party to take on the liability) due to the difficulty of getting annuity quotations and there being no immediate requirement by the Employer or Trustee to consider this as an option.

The Employer needs to be aware that buying out pension liabilities in the event of winding up the Plan would be more expensive in the open market due to the limited provider options that are currently available. As an indication, a mix of two single life and three reversionary annuities for a male age 70 (and spouse three years younger, if applicable) could cost around 10 percent more than the current actuarial liability value (based on annuity rates available on Challenger's website and a general summary document they have provided with impact of annuity variations on price).

If the Trustee decides to transfer the pension liability to a third party, it is unlikely that the assets will be sufficient due to risk, expense and profit margins of the third party and an additional contribution as determined by the Actuary would need to be paid by the Employer in order to maintain the security of other members' benefits. However, note that there are limited annuity options available in the Australian market and exact matching of the pension liabilities may not be possible. If the Trustee or Employer would like to explore this option further, we could attempt to obtain quotations from annuity providers.

Section 6 – Adequacy of Insurance Arrangements

The Plan Trustee has taken out insurance to protect the assets against certain contingencies which may have a material adverse effect on the solvency of the Plan.

Death or Total and Permanent Disablement Insurance (Lump Sum)

The Trustee has affected Group insurance (with AIA Australia) to cover part of the lump sum benefits payable from the Plan in the event of the death or Total and Permanent Disablement (TPD) of members. The Sum Insured is designed to supplement the proportion of the benefit which has already been accrued in respect of the members within the Plan and to provide the balance of the relevant benefit from the insurance arrangement. Insurance replaces the otherwise volatile impact on the Plan of payments required in respect of the 'unfunded' portion of each death or disablement benefit with an annual premium, which can be taken into account in the financial planning of the Plan.

The Trustee has confirmed that there are no unusual terms and conditions in the insurance contract. At the present time, the formula used to determine the amount to be insured is as follows:

Accumulation Members

Insured Amount = 15 percent x Salary x Future service to age 65 (in years and complete months)

When a member's sum insured reduces to 1 x salary, default death cover continues at that level until age 70 whilst TPD cover reduces in accordance with the default formula and ceases at age 65.

Death or Total and Permanent Disablement (TPD) Funding and Insurance

The following table shows the funded and insured portions of the benefit. It identifies the shortfall or excess amount of insurance in the event that all members were to die or become totally and permanently disabled.

	31 August 2023
	Death and TPD Benefit ($)
Total Sum Insured (A)	[redacted]
Plan Assets excluding pension assets (B)	[redacted]
Available on Death or TPD (A)+(B)=(C)	[redacted]
Total Death or TPD benefits (D)	[redacted]
Excess/(shortfall) (C) - (D)	0

Recommendation

I have reviewed the insurance formula and confirm that, in my view, it remains appropriate and the current insurance arrangement should be maintained.

Indemnity Insurance

The Trust Deed provides an indemnity to the Trustee against claims which may be made against it. This is secured against the Assets of AMP Super.

The Trustee has taken out trustee indemnity insurance to help protect the Trustee, its Directors and AMP Super against certain liabilities, that is consistent with the size and nature of its business and industry standards. As with any insurance, the indemnity is subject to the terms and conditions of the relevant insurance policy.

Material Issues Arising From Insurance

There are no material issues arising from insurance, although the Trustee should periodically review that all insurance cover remains sufficient.

Section 7 – Sensitivity Analysis and Projections

Pensioner Sensitivities

The values of the benefit liabilities shown in this report depend on the assumptions used to calculate them. The main assumptions relate to pension increases and the long-term investment return (net of investment expenses). Examples below provide an indication of the effect on the Pensioner liabilities of changing these assumptions only. The actual investment earning rate and pension increase rate may not be constantly above or below the rates assumed in carrying out the projection of benefits and the actual results may not fall within the ranges shown in the table below:

Assumptions	Pensioner liabilities as at 31 August 2023 ($)
This Valuation	[redacted]
Last Valuation Basis	[redacted]
Mortality rate* age rated up by 2 years	[redacted]
Mortality rate* age rated down by 2 years	[redacted]
Pensioner Investment return plus 1% p.a. (7.3% p.a.)	[redacted]
Pensioner Investment return minus 1% p.a. (5.3% p.a.)	[redacted]

* Australian Life Tables 2015-2017 rated down by 2 years and incorporating 25 years mortality improvement factors.

The age rating sensitivities provide a rough guide to the impact of different mortality experience. In practice, given the small number of pensioners, their mortality experience could be significantly different to assumed and the Employer is exposed to the risk of pensioners living longer than assumed in this valuation.

The Pensioner investment return has a large impact on the liability (1 percent p.a. lower return has approximately 10 percent increase in liability impact) for pensioners and will need to be closely monitored given there are only pensioners remaining in the Plan.

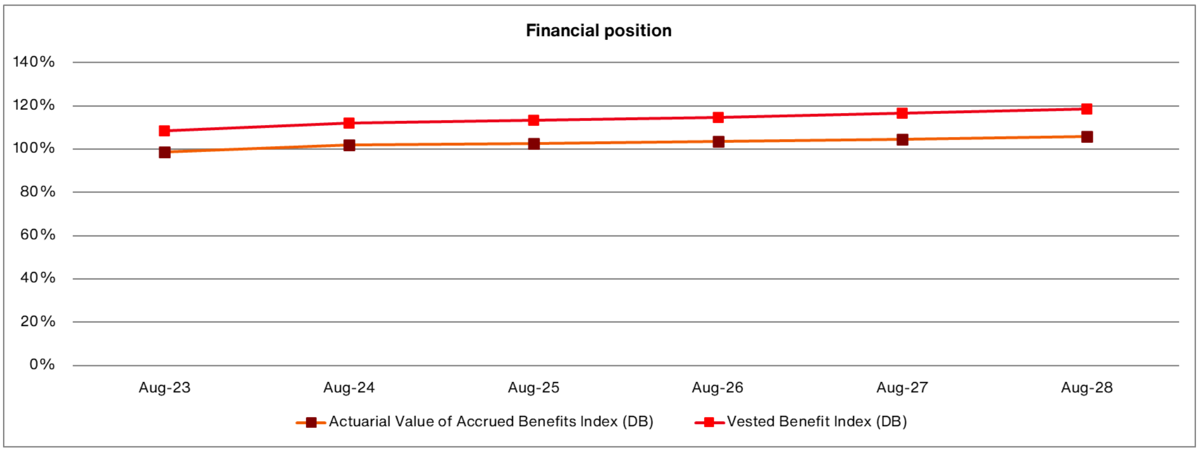
Post Valuation Events

The Plan has earned an average investment return of 5.1 percent from the date of the valuation to 19 February 2024. This is higher than the rate assumed for the valuation and has further strengthened the financial position of the Plan. I estimate that coverage of Vested Benefit (exclusive of Accumulation members) has increased from 108.4 percent at the valuation date to approximately 110.9 percent as at 19 February 2024. This has been taken into account in the recommended Employer contribution holiday in respect of pensioner members.

As Minimum Requisite Benefits (MRBs) are accumulation in nature, they will have moved in line with this investment return. Therefore, the funding position, in regards to MRBs, is unchanged since the valuation date.

Projection of Future Liabilities

The graph below shows the projected value of Defined Benefit Vested Benefits and Actuarial Value of Accrued Benefits for Defined Benefit members funding indices over the next five years. These projections have been based on defined benefit liabilities (i.e., pensioners) and assume that the Employer will continue the contribution holiday as recommended (refer to Section 9 of this report) and are based on the assumptions used to calculate past service liabilities at each of the future dates. These projections also allow for the post valuation events described above.

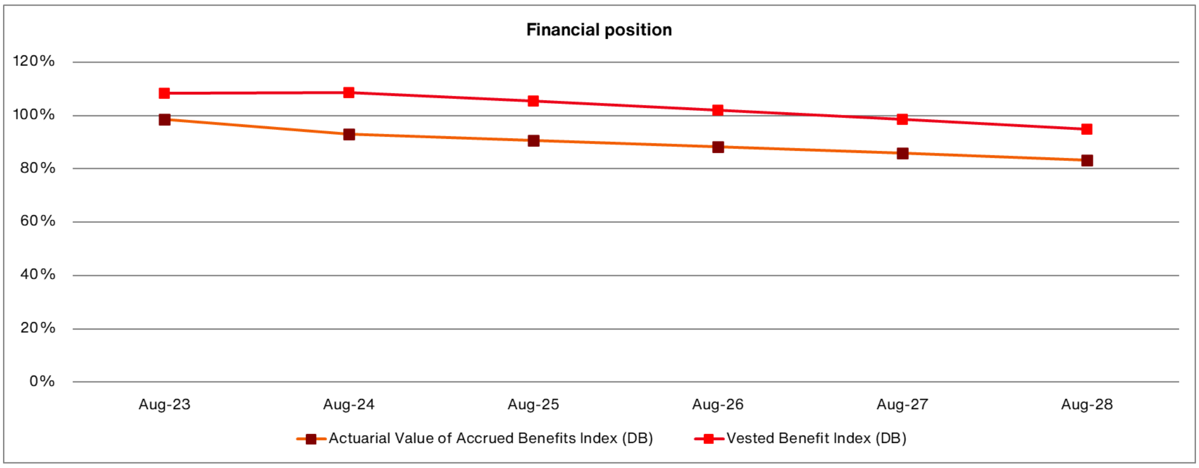


The graph shows that on these assumptions the Plan is expected to remain in a satisfactory financial position on a Vested Benefit basis from 31 August 2023, i.e., Vested Benefit Index is at least 100 percent from 31 August 2023 to 31 August 2028. Based on the valuation assumptions the Plan is expected to reach a 100 percent funding level on an Actuarial Value of Accrued Benefits basis.

The above projections assume a percentage of the membership survives each year. However, with only five pensioners and three of them have spouse reversionary pensions, this creates a situation where the projections have part of a person surviving. As the pensions will continue until the death of the pensioners and their spouses, and there are no special payments on death there can be a large range of financial position outcomes depending on pensioner mortality.

If some or all of the pensioners and their spouses pass away earlier than expected there would be a surplus arising at that time. Alternatively, the pensioners and their spouses could live longer than expected, and even beyond the maximum lifetime of the Australian Life Tables of age 109.

As such, I have also considered the projections assuming all the pensioners and their spouses survive (i.e., no mortality assumptions) at each future projection year.



This graph shows that on this conservative assumption of no pensioner (or spouse, where relevant) deaths in the 5-year projection period and assuming the Employer continues the contribution holiday, the Plan is expected to continue to be in a satisfactory financial position on a Vested Benefit basis from 31 August 2023 until at least 31 August 2026 and fall into an unsatisfactory financial position some time after that. If the pensioners and their spouses continue to survive beyond 31 August 2026, the recommended contribution arrangements will need to be revisited.

The graph above shows the Plan is not expected to reach a 100 percent funding level on an Actuarial Value of Accrued Benefits basis. However, we note that the Actuarial Value of Accrued Benefits basis is a more conservative measure of liability than Vested Benefits, as it includes provision for future expenses. While 100 percent funding is desirable, I do not consider it a requirement for meeting benefits purposes, as long as expenses can be paid when they fall due as well as meeting pension benefits.

Assuming the Employer continues the contribution holiday which I have recommended, I expect that on the assumptions, methods and asset values adopted in the valuation, that the Assets will remain sufficient to cover the value of the pensioner liabilities and expenses during the period up to 31 August 2028 based on valuation assumptions and the funding position will be reviewed each year to take into account experience versus these assumptions.

Section 8 – Material Risks

Financial Risk

The items that have the greatest impact on the financial position of the Plan are the pensioner mortality (discussed in Section 7 and below) and the differences between the assumed and the actual long-term investment return. If there are lower than assumed investment returns, the assets of the Plan would be reduced compared to the assets expected and may then be insufficient to cover members' benefits. This may then require the Employer to make larger contributions to the Plan. If the Employer is willing and able to make these larger contributions and accept the volatility involved, a deterioration in the financial position can be managed.

Other strategies to mitigate investment risk is to change the asset allocation on the Defined Benefit related assets to a less risky strategy (note: that this would generally increase the long-term cost to the Employer but provide lower contribution volatility).

Employer Financial Viability

The future of the Plan relies on the Employer remaining a viable entity and being willing and able to pay contributions as and when needed. The Trustee should discuss the valuation report with the Employer and ensure the Employer understands the recommendations before agreeing to the contribution amounts.

Plan Specific Risks

Pensioners

As at the valuation date, the remaining 5 DB members of the Plan are pensioners and their average age as at 31 August 2023 is 72.7 years.

If a pensioner (or their spouse) outlives the assumed life expectancy, this may cause the assets of the Plan to be insufficient to cover pensioners' benefits. This would then require additional contributions to be made by the Employer.

Please note that the valuation results are based on best estimate assumptions and therefore represent a "business as usual" approach. The Employer also needs to be aware that buying out these pension liabilities in the event of winding up the Plan would be more expensive in the open market due to the limited provider options that are currently available and the risk, expense and profit margins a provider will require. As an indication, a mix of two single life and three reversionary annuities for a male age 70 (and spouse three years younger, where applicable) could cost around 10 percent more than the current actuarial liability value (based on annuity rates available on Challenger's website and a general summary document they have provided with impact of annuity variations on price).

Size of the Plan

The defined benefit section of the Plan has 5 pensioners members and $4.0m of defined benefit related assets remaining. As a result, the Plan is exposed to additional risks than when it was larger. In particular, given the number of members remaining the “law of averages” may no longer hold and actual experience of the remaining few members may be significantly different to the assumptions adopted for funding calculations. This can result in a more volatile funding position, with the experience of just one member now having a proportionately larger impact.

Other risks that the Plan is exposed to as a result of its smaller size include:

- Many costs are not directly linked to the number of members or asset value of the Plan. Therefore, the expenses will have a greater impact on the funding position and/or the Employer contributions required. Similarly, any cost associated with legislative or other changes will also impact the funding position.
- As member numbers decline, so too can the remaining lifetime of the Plan. The assumptions adopted for funding purposes and in setting the investment strategy may have considered a longer time horizon and now may need to change to reflect the shorter timeframe.

Investment Policy

As mentioned above, market risk is a key driver in the financial position of the Plan. However, there are other investment risks to consider. These include:

- **Liquidity Risk** – the risk that illiquid assets or large cashflows from the Plan cause the payment of benefits to be delayed or assets to be sold at reduced values to meet liability obligations.

  The Trustee has a liquidity policy in place to assess that the Plan holds sufficient cash balances and other liquid assets to meet anticipated benefit payments and expenses as they fall due.
- **Concentration Risk** – the risk that investments are concentrated in one particular asset class, country or manager, the poor performance of which could cause a material effect on the investment return.

  The Trustee should periodically monitor the risks summarised in this section and seek advice or take action as may be deemed necessary.

Section 9 – Recommendations and Actuary's Summary Statement for the Purposes of SPS 160

Recommendations

Future Contribution Recommendations

I recommend that the Employer pays contributions to the Plan at the amounts set out in the table below:

Category of membership	Contributions
Pensioner members	Nil monthly contributions
Accumulation members	SG contributions (based on Ordinary Time Earnings)

These amounts are the same as those currently being paid**.**

The Employer contributions in respect of Accumulation members must be paid by the 28th day of the month following the quarter end or required date as determined by legislation.

The recommended contributions will need to be reviewed prior to the next regular annual actuarial investigation due with an effective date of 31 August 2024 if one or more of the notifiable events within the Funding and Solvency Certificate occur prior to that date as advised by the Trustee/Employer (unless, after reviewing the details of a specific event which would otherwise be classified as a notifiable event, the Actuary advises the Trustee in writing that such an event does not constitute a notifiable event).

Shortfall Limit Recommendations

I have reviewed the Shortfall Limit of 96.0 percent (see Section 5) and confirm that, in my view, it remains appropriate. This will need to be reviewed if the Trustee changes the investment strategy.

Insurance Recommendations

I have reviewed this formula (see Section 6) and confirm that, in my view, it remains appropriate.

Investment Recommendations

The pension benefits are not impacted by the investment return. As a result, the financial position of the Plan and contribution requirements are particularly sensitive to the investment return achieved on the Plan's assets.

Note that regular pension rebalancing is required to ensure that assets supporting pension liabilities are maintained at a similar level, which will be reviewed each year considering experience versus assumptions (particularly investment returns, pension increase rate and longevity or mortality of pensioners and their spouses, if applicable) and the funding position.

After considering the financial position at the financial date and investment returns up to 19 February 2024, we recommend that all defined benefit assets for the Plan remain in the Future Directions Balanced non-taxed investment as the assets are now approximately equal to the current pension liabilities and present value of expected future expenses.

In my opinion the investment strategy is appropriate to meet the long-term liabilities of the Plan, being the ongoing income streams of the Plan's pension members and their spouses, where reversionary.

The Employer may prefer to have the Defined Benefit assets to be invested in a less growth orientated investment in order to minimise the fluctuations of assets in volatile investment markets. This may increase the long-term costs of running the Plan but will reduce fluctuations in the contributions in the short-term. If required, we can consider the financial impact of such a change.

The levels of liquidity available to the Plan are adequate to meet any of its short-term liquidity requirements, particularly in relation to the payment of pensions via contributions from the Employer and/or sale of the Plan's Assets.

Crediting Rate Recommendations

I have reviewed the crediting rate policy for the Plan and confirm that, in my view, it remains appropriate and should be maintained. For more information refer to Appendix C.

Monitoring Recommendations

I have reviewed the current practice of carrying out the actuarial investigation on an annual basis and confirm that, in my view, it remains appropriate given the Australian Prudential Regulation Authority's (APRA's) requirements for plans that pay pensions.

Disclaimer

The calculations provided in this report are based on a number of assumptions. The assumptions used are best estimates only and may not be borne out in practice. It is therefore important to review the calculations in the light of actual experience and obtain regular updates.

Actuary's Statement for the Purposes of SPS 160

I have conducted a regular triennial actuarial investigation of the AMP Super Fund - Sibelco Australia Superannuation Plan (the Plan) as at 31 August 2023 covering the three-year period to that date. In my opinion:

1) As at 31 August 2023, the fair value of the net Assets of the Plan for Defined Benefit members, based on the financial information provided by AMP Super Fund, plus the Accumulation members' benefits for Accumulation member assets, was [redacted] and this is the value of assets used to determine the Employer contribution amounts with an allowance for investment returns for the period from 31 August 2023 to 19 February 2024.

2) The value of the Assets of the Plan was inadequate to meet the value of liabilities of the Plan in respect of the Actuarial Value of Accrued Benefits of [redacted] as at 31 August 2023. This

amount was not used for the purposes of Australian Accounting Standard AASB1056. The Trustee has determined to use an approximate method for the AASB1056 Defined Benefit member liabilities to ensure timely disclosure in AMP Super Fund financial statements.

3) The value of the Assets of the Plan was adequate to meet the value of liabilities of the Plan in respect of the Minimum Requisite Benefits as at 31 August 2023.

4) The investigation disclosed the Plan was in a satisfactory financial position as at 31 August 2023. The Plan's financial condition has not fallen below the Shortfall Limit set by the Trustee at the valuation date.

5) The Plan has a liability in respect of current pensioners. The present value of their future payments has been included in all benefit calculations. The assets are sufficient to provide for the risk of longevity. Should the Plan be in an unsatisfactory financial position, the benefits of pension members will continue to be paid and the Employer will be required to increase contributions in order that the security of member's benefits will not be jeopardised. Any other member who has postponed retirement or deferred receipt of a benefit remains a member under the Rules and any relevant liability is included. Note that the assets supporting the pension liabilities are not segregated from the rest of the Plan Assets, however holdings are in a separate investment option for tax purposes, and as pensioners are either past employees or their dependants, their benefits have a priority (after Minimum Requisite Benefits) in the event of termination of the Plan.

6) There is also a high degree of probability that the five pensions currently in payment will be able to be paid as required under the Plan's governing rules. This statement has been made considering the Plan's earnings from the date of the regular triennial actuarial investigation to 19 February 2024. This statement is made in accordance with Superannuation Prudential Standard (SPS) 160, SIS Regulation 9.31(1) and Professional Standard 410 issued by the Institute of Actuaries of Australia.

7) I have recommended contributions to ensure that the assets will continue to be adequate to meet the liabilities of the Plan and I expect the Plan to remain in a satisfactory financial position as defined in the SIS Regulations.

8) All Funding and Solvency Certificates required to be obtained during the period of investigation were provided. I expect that an actuary will be able to certify the solvency of the Plan in any Funding and Solvency Certificate required during the three-year period following the valuation date.

Saffron Sweeney

Saffron Sweeney
Fellow of the Institute of Actuaries of Australia
Aon Risk Services Australia Limited

23 February 2024

Appendix A – Summary of Plan Rules

Eligibility

There are five pensioner members with three spouses who are eligible for pension benefits from the Plan.

Plan Structure

The Unimin Australia Superannuation Plan (the former fund) is a superannuation plan with a Defined Benefit section and is constituted by a Trust Deed originally dated 1 July 1987 (as amended from time to time). It was transferred into the AMP Signature Super Master Trust to become the Unimin Australia Superannuation Plan within the Master Trust on a successor fund basis effective from 1 April 2006. The Plan was renamed the Sibelco Australia Superannuation Plan in 2010. All members' benefits in the 'SignatureSuper' product were transferred from the AMP Superannuation Savings Trust by way of a successor fund transfer to N.M. Superannuation Proprietary Limited as trustee of the AMP Super Fund on 15 May 2020.

The main provisions of the Plan relating to benefits and contributions are set out below. The Plan is a complying fund for the purposes of the Superannuation Industry (Supervision) Act 1993. This results in the Plan being taxed at the favourable rate of 15 percent on income net of allowable deductions.

Benefits

Payment Frequency

The pension is payable monthly.

Pension Term

The pension is payable for a minimum period of 5 years and until the last monthly instalment prior to the death of the Member.

Reversionary Dependant's Pension

The member had the option of reducing their annual pension to 85 percent of their standard annual pension to include a reversionary pension of 50 percent of the Member's pension at the date of the Member's death payable until the death of the spouse.

Pension Increase Date

Annually at 1 September.

Pension Increase Rate

The lesser of 2.5 percent p.a. and the annual percentage change in the All-Groups Consumer Price Index prior to each 1 September increase date.

Accumulation Members

All benefits on termination or leaving the Plan are the sum of the account balances in the member's name plus any insurance that is relevant to the member and relates to the benefit being paid.

Appendix B – Membership

Membership Characteristics as at 31 August 2023

The main characteristics of the Plan's Defined Benefit membership at the valuation date are summarised in the following table. For comparison, active figures for the previous valuation date (31 August 2020) are shown also:

[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

[redacted]

Quality of Data

Member data was received electronically and was in good order for the purposes of preparing this Report. Defined benefit individual membership data as well as asset information was reconciled to the last triennial actuarial investigation data.

Accumulation members' cash flow information was not available from the Administrator and therefore a full reconciliation on accumulation members' assets was not carried out.

We have relied on the asset information provided by the Plan administrator as at 31 August 2023 as audited financial statements for the Plan at that date are not available, however we understand that the financial statements for the AMP Super Fund as at 30 June 2023 have been audited and signed on 21 September 2023.

Administration

No significant variations were detected between the method of calculation of benefits on the administration system and our calculations. The data received was adequate and appropriate for the purposes of the regular triennial actuarial investigation. Data checking included indexation of pension payments indexed according to the agreed methodology.

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Appendix C – Accounts and Summary of Assets

Accounts

The following is a summary of the cash flows provided by the Plan administrator for the regular triennial actuarial investigation period 1 September 2020 to 31 August 2023. The final accounts of the AMP Super Fund for 30 June 2023 have received audit clearance.

	1 September 2020 to 30 August 2021 ($)	1 September 2021 to 30 August 2022 ($)	1 September 2022 to 30 August 2023 ($)	1 September 2020 to 30 August 2023 ($)
Plan Assets at start of period (A)	[redacted]	[redacted]	[redacted]	[redacted]
Accumulation accounts at start of period* (B)	[redacted]	[redacted]	[redacted]	[redacted]
Defined Benefit related Plan Assets at start of period (C) = (A) – (B)	[redacted]	[redacted]	[redacted]	[redacted]
Plus				
Employer contributions	[redacted]	[redacted]	[redacted]	[redacted]
Investment income (including capital appreciation/depreciation)	[redacted]	[redacted]	[redacted]	[redacted]
Less				
Benefits (net of insurance recoveries)	[redacted]	[redacted]	[redacted]	[redacted]
Administration and other charges	[redacted]	[redacted]	[redacted]	[redacted]
Income tax	[redacted]	[redacted]	[redacted]	[redacted]
Defined Benefit related Plan Assets at end of period (D)	[redacted]	[redacted]	[redacted]	[redacted]
Accumulation accounts at end of period (E)	[redacted]	[redacted]	[redacted]	[redacted]
Plan Assets at end of period (F) = (D) + (E)	[redacted]	[redacted]	[redacted]	[redacted]

Note that assets backing pension liabilities are included in the above assets. The amount of pension assets at 31 August 2020 and at 31 August 2023 was [redacted] and [redacted] respectively. All DB assets are held in the Future Directions Balanced non-taxed investment and therefore receive favourable tax treatment.

Summary of Assets

Accumulation members may invest their account balances in any option. Where an investment option is not chosen by Accumulation members account balances are invested in the default AMP Super Fund MySuper option.

Pensioner assets are separately invested in the tax-free Future Directions Balanced Portfolio.

The benchmark asset allocation of the Future Directions Balanced portfolio is as follows:

By Asset Class	31 August 2020	31 August 2023
(based on benchmark asset allocation)	**(%)**	**(%)**
Australian Shares	23.0	27.0
International Shares	31.0	32.0
Property	6.0	14.0
Alternatives Asset - growth	17.0	2.0
Alternatives Asset - defensive	2.0	2.0
Australian Fixed Interest	10.0	8.0
International Fixed Interest	8.0	9.0
Cash	3.0	6.0
Total	**100.0**	**100.0**

The asset valuation method is in accordance with Professional Standard 404 published by the Institute of Actuaries of Australia. There were no material qualifications identified in the latest audit report that impact on the value of assets.

Crediting Rate Policy

The Plan credits the actual return after investment related expenses and tax to Accumulation members' accounts based on daily unit prices. This method of crediting interest is appropriate as members receive interest on their accounts in accordance with what the Plan has earned and there are no cross-subsidisations. Investment earnings can be positive or negative and are based on the changes in unit price of the relevant option.

Appendix D – Funding Method

Funding Method

The value of defined benefit liabilities is determined as the present value of expected future cashflows. This is the same method as was used at the last regular triennial actuarial investigation.

Summary of Method of Attributing Benefits to Past Membership

The total benefit is attributable to past service since DB members have terminated service and are receiving a pension.

The present value of expected future expenses is also allowed for in the past benefit component of the Actuarial Value of Accrued Benefits.

Adjustments

Accumulation members' vested benefits have been added to the past membership liability at their face value.

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