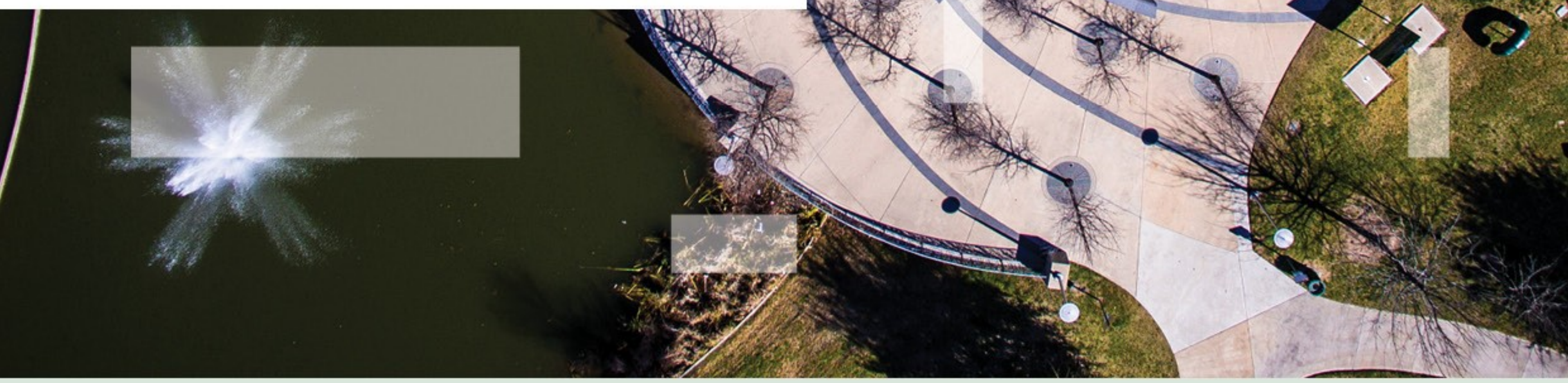
Local Authorities Superannuation Fund

Report on the Actuarial Investigation as at 30 June 2021 The Defined Benefit Plan

7 September 2021



Towers Watson Australia Pty Ltd
ABN 45 002 415 349   AFSL 229921

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Section 1: Executive Summary

1.1 We are pleased to present our report on the annual actuarial investigation of the Defined Benefit plan of the Local Authorities Superannuation Fund (the Fund). This report has been prepared for Vision Super Pty Ltd, the Trustee of the Fund.

Results of previous actuarial investigation

1.2 The previous triennial actuarial investigation was conducted by Matthew Burgess, FIAA, on behalf of Willis Towers Watson as at 30 June 2020. The results of that valuation were published in a report dated 8 September 2020.

1.3 In that review, the recommended funding arrangements comprised of the following:

a Contributions equal to 9.5% of salary for employee members, increasing with increases in the Superannuation Guarantee rate;

b An additional contribution to cover the excess of the benefits paid as a consequence of retrenchment above the funded resignation or retirement benefit (the funded resignation or retirement benefit is calculated as the minimum of (100% and the VBI) multiplied by the vested benefit), plus contribution tax;

c Outstanding contributions in respect of calls made at the previous actuarial investigations; and

d Additional top up contributions that may be recommended in the future, if the Defined Benefit plan becomes in an unsatisfactory financial position.

Authorities also need to contribute the amount of members' salary sacrifice contributions.

1.4 Various recommendations including in respect of the ongoing review of the investment strategy, including liquidity, were also made.

1.5 We have been advised that all of the above recommendations were implemented.

Assumptions for this actuarial investigation

1.6 The investment strategy of the Defined Benefit Plan has slightly increased its exposure to growth assets since 2020. The financial assumptions used in this actuarial investigation are summarised below and reflect the current investment strategy. The estimated future investment returns have reduced and price inflation has increased reflecting the capital market assumptions from Vision Super's investment consultant.

	30 June 2021	30 June 2020
Net Investment Return	4.75% p.a. (gross: 5.50%p.a.)	5.60% p.a. (gross: 6.50%p.a.)
Salary Inflation	2.75% p.a.	2.5% p.a. for 2 years 2.75% p.a. thereafter
Price Inflation	2.25% p.a.	2.0% p.a.

1.7 We have retained the demographic and expense assumptions used in the 30 June 2020 actuarial investigation.

Results of this actuarial investigation

Funding Status Measure

1.8 This actuarial investigation has shown that the Defined Benefit plan's financial position has improved since the last review as at 30 June 2020, and remains satisfactory.

	30 June 2021 Funding Indices	30 June 2020 Funding Indices
	%	%
Vested Benefit Index[1]	109.8	104.6
Discounted Accrued Benefit Index[2]	113.4	110.7
Minimum Requisite Benefit Index[3]	151.2	142.2

1. Vested Benefits are the benefits payable if all members resign/retirement immediately.
2. Discounted Accrued Benefits discount the future benefits expected to be paid in respect of completed membership to a present value.
3. Minimum Requisite Benefits are the minimum Superannuation Guarantee benefits.

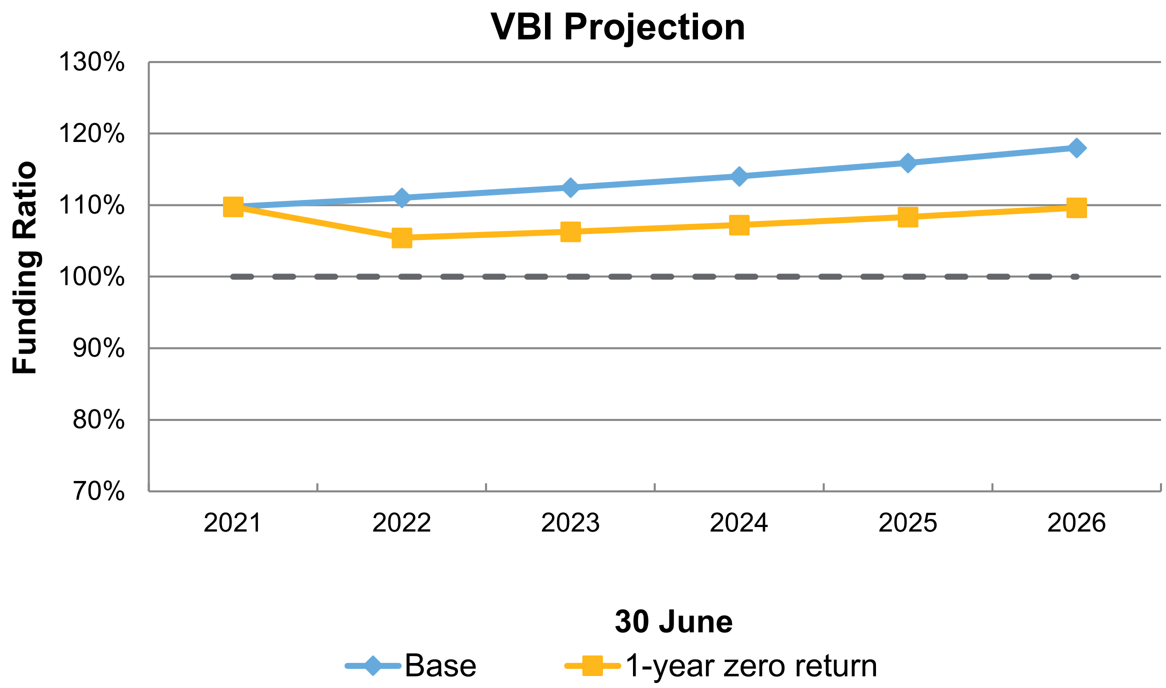
1.9 The improvement in asset coverage of the present value of past benefits is primarily due to financial experience (excess of investment return above salary increase and price inflation) being significantly better than assumed. The changes to the financial assumptions offset some of this favourable experience.

1.10 The Defined Benefit plan's assets cover vested benefits at the review date and therefore the Defined Benefit plan was in a satisfactory financial position at that date as defined in SPS 160.

1.11 We understand the Authorities increased the Division C contribution rate from 9.5% of Salary to 10.0% of Salary from 1 July 2021. Our projection below shows that, on this basis and the assumptions made in this actuarial investigation and assuming that the Authorities makes contributions in line with the recommendations set out below, the Defined Benefit plan is expected to remain in a satisfactory financial position.

1.12 If experience is as expected the Authorities are not expected to be required to make any further contributions because of the actuarial surplus that exists. However, we have been advised that the Trustee's preference is to use surplus to reduce investment risk over time to manage the potential for additional lump sum contributions to be required from Authorities if experience is worse than expected. Hence, we have recommended that the current contribution rates be retained and that the Trustee continues to consider when de-risking of the investment strategy is appropriate.

1.13 The future funding position, and the potential for additional contributions to be required from Authorities, is dependent upon future experience and particularly future investment returns. The following chart compares the expected Vested Benefit Index (VBI) in the best estimate "base case" and if there is a nil return in the year to 30 June 2022 (and expected returns thereafter). It should be noted that a nil return is not the worst outcome that could occur.



1.14 In the zero-return scenario, the VBI is expected to reduce to 105% as at 30 June 2022. This indicates that in the case of a large negative return for the year to 30 June 2022, the VBI may drop below 100%, meaning that top-up contributions may be required so that the VBI would be expected to return to 100% within the legislated three years.

Recommendations

1.15 We recommend that the Authorities continue to adopt the following funding plan:

a Contributions equal to 10% of salary for employee members, increasing with increases in the Superannuation Guarantee rate;

b An additional contribution to cover the excess of the benefits paid as a consequence of retrenchment above the funded resignation or retirement benefit (the funded resignation or retirement benefit is calculated as the minimum of (100% and the VBI) multiplied by the vested benefit), plus contribution tax;

c Outstanding contributions in respect of calls made at the previous actuarial investigations; and

d Additional top up contributions that may be recommended in the future, if the Defined Benefit plan becomes in an unsatisfactory financial position.

Authorities also need to contribute the amount of members' salary sacrifice contributions.

1.16 The ratio of the market value of the Defined Benefit plan's net assets to vested benefits should continue to be measured quarterly, and the Trustee's funding approach be reassessed accordingly.

1.17 In regards to the Defined Benefit plan's investment policy, we recommend that:

- The funding position and liquidity requirements of the Defined Benefit plan continue to be considered in setting investment policy. The current allocation to illiquid assets is material, and the Defined Benefit plan is closed to new members and has segregated assets. The adequacy of current and projected liquidity should continue to be reviewed, and stress tested, at least annually.

- The Board continue to consider de-risking assets as a means of reducing the risk of subsequent higher contributions due to future poor investment experience. These considerations must be made concurrent with funding implications as they are directly linked.

1.18 As required under SPS 160, the Trustee has set the Shortfall Limit for the Defined Benefit plan at 97%. Given the current growth asset allocation, we consider this Shortfall Limit is appropriate for the Defined Benefit plan.

1.19 We confirm that in our opinion the Defined Benefit plan's self-insurance arrangements remain appropriate. Furthermore, based on our analysis we recommend that the self-insurance reserve be retained at $5 million.

1.20 The next actuarial review should be carried out as at a date no later than 30 June 2022.

Matthew Burgess

Matthew Burgess
Fellow of the Institute of Actuaries of Australia

Surath Fernando
Fellow of the Institute of Actuaries of Australia

Towers Watson Australia Pty Ltd
Level 4, 555 Bourke Street
Melbourne VIC 3000

7 September 2021

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Section 2: Introduction

2.1 This report was commissioned by Vision Super Pty Ltd, the Trustee of the Local Authorities Superannuation Fund (the Fund).

2.2 The Local Authorities Superannuation Act (1988) (the Act) was proclaimed on 25 May 1988. The Act has been replaced and since 1 July 1998, the Fund has been governed by a Trust Deed.

2.3 The Fund is a “regulated fund” under the provisions of the Superannuation Industry (Supervision) Act 1993 (“SIS”). We understand that the Fund is treated as a complying superannuation fund for taxation purposes and is a taxed superannuation fund.

2.4 In accordance with Superannuation Prudential Standard 160 (SPS 160), “triennial” actuarial investigations are required at intervals of not more than three years. Annual actuarial investigations are also required because the Defined Benefit plan provides life-time pensions.

2.5 In accordance with Clause A.20.1, the Trust Deed requires each Authority to contribute to the Fund in respect of a particular employee the amount or rate of contributions determined by the Trustee after obtaining the advice of the actuary, including any unfunded liability amount. The Trustee also has some flexibility in adjusting benefits in accordance with Clause A.21 in the event that an Authority terminates contributions to the Fund.

2.6 A triennial actuarial investigation was completed for the Defined Benefit plan as at 30 June 2020 and our report was dated 8 September 2020. The report was signed by Matthew Burgess and Surath Fernando.

2.7 This actuarial investigation report is not as comprehensive as a triennial actuarial investigation. For example, we have not re-examined the demographic experience to review the assumptions or included analysis on the sensitivity of our results to the assumptions.

2.8 This actuarial investigation report covers the Defined Benefit plan within the Fund, which is a sub-fund as defined in SPS 160. The City of Melbourne plan, the Parks Victoria plan and the divisions of the Fund that pay only accumulation benefits are not considered in this report.

2.9 The purpose of this report is to:

- examine the sufficiency of the assets in relation to members’ accrued benefit entitlements;
- determine the contribution rate required to ensure that the Defined Benefit plan maintains a satisfactory financial position;
- examine the suitability of the Defined Benefit plan self-insurance and investment arrangements;
- provide actuarial certification in respect of the funding of pension entitlements;
- satisfy requirements of the Trust Deed; and
- meet legislative requirements.

This actuarial review has been conducted in order to meet the Trustee’s obligations in accordance with SPS160 issued under section 34C of the Superannuation Industry (Supervision) Act (SIS Act) which came into effect from 1 July 2013.

2.10 This report satisfies the requirements of the following Professional Standards and Guidance of the Institute of Actuaries of Australia:

- Practice Guideline 1
- Professional Standard 400
- Professional Standard 402
- Professional Standard 404
- Professional Standard 410.

Actuarial Investigation as at 30 June 2020

2.11 The report on the actuarial investigation as at 30 June 2020 concluded that the experience of the Defined Benefit plan over the year to 30 June 2020 had resulted in a deterioration in asset coverage of vested benefits. However, the Defined Benefit plan remained in a satisfactory financial position and the current employer contributions were expected to be more than sufficient. We understood that the preference of the Trustee was to retain the existing contributions and seek to reduce investment risk overtime.

2.12 We recommended that the following funding plan be adopted:

a Contributions equal to 9.5% of salary for employee members, increasing with increases in the Superannuation Guarantee rate;

b An additional contribution to cover any excess of the benefits paid as a consequence of retrenchment above the funded resignation or retirement benefit (whereby the funded resignation or retirement benefit is calculated as the minimum of (100% and the VBI) multiplied by the benefit), plus contribution tax; plus

c Outstanding contributions in respect of calls made at the previous actuarial investigations; and

d Additional top up contributions that may be required in the future if the plan becomes in an unsatisfactory financial position.

Authorities also needed to contribute the amount of members' salary sacrifice contributions.

2.13 The Trustee has implemented these recommendations in full. No additional contributions are currently required under recommendation 2.12(d) because the Defined Benefit plan is not in an unsatisfactory financial position.

2.14 The other recommendations in the report were that:

a The self-insurance reserve be retained at $5 million;

b The funding position of the Defined Benefit plan and future liquidity requirements continue to be considered in setting investment policy;

c The Board continue to consider de-risking assets as a means of reducing the risk of subsequent higher contributions due to the future poor investment experience, whilst considering any subsequent funding implications; and

2.15 The Trustee has adopted these recommendations.

Events since the 30 June 2020 Actuarial Investigation

2.16 There have been no amendments to the Defined Benefit plan benefits.

2.17 The Superannuation Guarantee (SG) Contribution rate increased to 10% from 1 July 2021. We understand the Authorities increased the Division C contribution rate to reflect this change. There has been no other legislative changes or changes to benefits that have materially impacted on the funding of the Defined Benefit plan.

2.18 Vision Super advised that the Defined Benefit plan investment return for the year to 30 June 2021 was 17.9% p.a., which was higher than the return of 5.6% p.a. assumed in the 30 June 2020 actuarial investigation.

Reliance Statement and Data

2.19 This report is provided subject to our agreed Terms and Conditions of Engagement. This report is provided solely for the Trustee's use and for the specific purposes indicated above. It may not be suitable for use in any other context or for any other purpose.

2.20 Except where we expressly agree in writing, this report should not be relied on by any third party. In the absence of such consent and an express assumption of responsibility, no responsibility whatsoever is accepted by us for any consequences arising from any third party relying on this report or any advice relating to its contents.

2.21 The Trustee may make a copy of this report available to its auditors, Authorities and to any person to whom the Trustee may be required to provide a copy under relevant legislation, but we make no representation as to the suitability of this report for any purpose other than that for which it was originally provided and accept no responsibility or liability to the Trustee's auditors, Authorities or any third party in this regard. The Trustee should draw the provisions of this paragraph to the attention of its third parties when passing this report to them.

2.22 In conducting this review, we have relied upon information and data provided to us orally and in writing by the Trustee and other persons or organisations designated by the Trustee. We have relied on all the data and information provided, including plan provisions, membership data and asset information, as being complete and accurate. We have not independently verified the accuracy or completeness of the data or information provided, but we have performed limited checks for consistency.

2.23 The results presented in this report are directly dependent upon the accuracy and completeness of the underlying data and information. Any material inaccuracy in the data, assets, plan provisions or other information provided to us may have produced results that are not suitable for the purposes of this letter and such inaccuracies may produce materially different results that could require that a revised letter be issued.

Content of this Report

2.24 The remainder of this report is structured in the following manner:

- Sections 3 to 5 consider the data, assets, assumptions and methodology.
- Section 6 considers the financial position of the Defined Benefit plan at 30 June 2021.
- Section 7 considers the adequacy of funding of the Defined Benefit plan.
- Section 8 considers self-insurance.
- Section 9 considers material risks.
- Appendices A to E include supporting details of benefits, membership, actuarial assumptions, assets and actuarial surplus.
- Appendix F contains the statements required under SPS 160.

Section 3: Data and Experience

3.1 This section deals with the data used in the investigation and comments on the more significant factors bearing upon the experience of the Defined Benefit plan.

Membership

3.2 For the purposes of this investigation, we were supplied with information on active members of the Defined Benefit plan, deferred beneficiaries and pensioners as at 30 June 2021. While we have relied upon the data provided, from our checking processes we believe that the data is sufficiently accurate for the purposes of this investigation.

3.3 In summary, the active membership of the Defined Benefit plan has decreased by 254 (or 13.0%) from 1,954 at 30 June 2020 to 1,700 at 30 June 2021. The number of lifetime pensioners has decreased by 65 (or 1.6%) from 4,189 to 4,124 over the same period.

Summary of Defined Benefit Plan Membership Data		
Active Members	**30 June 2021**	**30 June 2020**
Number	1,700	1,954
Average Age	57.7 years	57.3 years
Average Past Membership	33.0 years	32.2 years
Average Salary	$95,036	$93,843
Lifetime Pensioners		
Number	4,124	4,189
Average Age	77.4 years	77.4 years
Average Annual Pension	$14,878	$14,184
Fixed Term Pensioners		
Number	4	5
Deferred Beneficiaries		
Number	1,227	1,292
Average Age	57.0 years	56.3 years
Average Account Balance	$271,064	$240,311

A detailed summary of the movement in active and pensioner membership is set out in Appendix B.

Salaries

3.4 We have examined the salary experience of Defined Benefit plan members over the year ending 30 June 2021. The data showed that the full time equivalent salary of Defined Benefit plan members who remained members as at 30 June 2021 grew by 2.0% p.a. over the period. This compares to growth of 2.8% p.a. over the year to 30 June 2020 for these members.

3.5 The actual increase over the year to 30 June 2021 was lower than the assumed rates of 2.5% p.a. for 2 years and 2.75% p.a. thereafter in the 30 June 2020 actuarial investigation.

3.6 It is of interest to compare the average rate of salary increase with the increase in Australian Average Weekly Ordinary Time Earnings (AWOTE).

Pension Indexation

3.7 The pensions are indexed semi-annually based on the change in the Consumer Price Index (CPI). Over the year ending 30 June 2021, the pension increase was 0.9% p.a.. This was lower than the rate of 2.0% p.a. assumed in the 30 June 2020 actuarial investigation.

Investment Returns

3.8 Vision Super has advised that the rate of return (net of tax and investment expenses) earned by the Defined Benefit plan for the year ending 30 June 2021 was 17.9% p.a..

3.9 Comparison of the 17.9% p.a. return with the salary increase rate (from paragraph 3.4) of 2.0% p.a. shows a real return of approximately 15.9% p.a. which is higher than the 2.85% p.a. long term real return assumed in the 30 June 2020 actuarial investigation.

3.10 In respect of pension liabilities, pension increases averaged 0.9% p.a., providing a net of tax real return of 17.0% p.a. The gross of tax real return would be of the order of 20% which is higher than the 4.5% p.a. assumed in the 30 June 2020 actuarial investigation.

3.11 The positive real returns over the valuation period have had a positive effect on the Defined Benefit plan's financial position.

Section 4: Assets and Investments

Assets

4.1 Copies of the Fund’s unaudited financial statements as at 30 June 2021 were supplied by Vision Super for the investigation together with details of the investment strategy at 30 June 2021. We were also provided a breakdown of the unaudited market value of assets by sub-plan. We have been advised by Vision Super that the unaudited financial statements have been prepared consistently with AASB1056.

4.2 The fair value of the Defined Benefit plan assets (including pensioners and deferred beneficiaries) as at 30 June 2021 used in the valuation was $2,413.5 million. No amounts are included in respect of accumulation accounts of members, except certain defined benefit offset accounts. It includes amounts in respect of deferred beneficiaries and fixed term pensioners.

4.3 The asset value includes the remaining contributions receivable in respect of past calls for additional contributions by Vision Super. We have been advised that the vast majority of the additional contributions have been paid by the Authorities.

4.4 The above fair value of assets excludes $5.0 million in respect of the Death and Disability reserve from the assets because we have not included an amount for incurred but not reported claims in the calculation of the funding position. In Section 8 we have commented on the amount of this reserve. Vision Super has excluded the Operational Risk Financial Requirement from the Defined Benefit plan assets in the financial statements.

4.5 We believe that the most suitable approach for this investigation is to adopt the fair value of assets for all purposes. The funding position of the Defined Benefit plan may be variable because of high volatility in asset valuations.

Asset Allocation

4.6 The Defined Benefit plan invests in a wide range of asset classes such as equity, property and fixed interest investments. Appendix D shows the Strategic Asset Allocation and the Actual Asset Allocation as at 30 June 2021. This asset allocation does not apply for deferred beneficiaries where members have investment choice nor the assets for small number of fixed term pensioners that are invested in defensive assets.

4.7 The strategic allocation to Growth Assets as at 30 June 2021 was 71.3%. The actual growth allocation as at 30 June 2021 was 74.2%.

4.8 In our opinion the allocation to growth assets is among a range of allocations that could reasonably be used by the Defined Benefit plan.

4.9 Setting the Strategic Asset Allocation is a balance between:

a A high allocation to growth assets, which is expected to produce relatively high but more variable investment returns and therefore lower but more variable Authority contributions; and

b A low allocation to growth assets, which is expected to produce relatively low but less variable investment returns and therefore higher but less variable Authority contributions.

4.10 The Defined Benefit plan has been closed to new members since 31 December 1993. Therefore, its liabilities will reduce significantly over the next ten years in real terms. If future investment returns are higher or lower than expected it is possible that a significant "actuarial surplus" or "actuarial shortfall" will again result. Therefore, it is recommended that the funding position of the Defined Benefit plan continues to be considered when setting investment policy.

Liquidity

4.11 As at 30 June 2021, 23.4% of the investments are in illiquid asset classes which include Infrastructure, Private Equity, Direct Property and some Alternative Debt.

4.12 This is close to the Strategic Target allocation for illiquid assets of 25.8%. This has increased slightly from 23.0% as at 30 June 2020. We note that while some of the illiquid assets are in fixed ended funds which will become liquid over time, others such as the Direct Property and Infrastructure investments will need to be sold or transferred from the defined benefit assets in the future.

4.13 In the long term, the defined benefit plans will require full liquidity. Therefore, we believe that Vision Super should continue to consider the time frame over which they will reduce the exposure to illiquid assets in the defined benefit plans to zero. As we are aware is currently the case, we suggest that the liability run off under various scenarios should continue to form part of this consideration.

4.14 Therefore, we recommend that Vision Super should continue to consider the time frame over which they will reduce the exposure to illiquid assets in the defined benefit plans to zero. We suggest that consideration of the liability run off under various adverse scenarios should continue to form part of this consideration.

Unit Pricing

4.15 Within the Fund there are defined contribution members as well as defined benefit members. The assets and liabilities of the defined contribution members are equal, subject to timing differences, with daily unit pricing being used. There is no investment reserving. We have been advised that the assets of the defined contribution members are segregated from the defined benefit assets and Vision Super has in place processes to limit cross subsidies between defined contribution and defined benefit members.

4.16 The Fund's Investment Governance Framework states that "Defined Benefit Investment options are considered separately from the Accumulation Investment options for rebalancing purposes." This means that the Defined Benefit plan's asset allocation should not be materially impacted by the experience of the defined contribution plans.

Shortfall Limit

4.17 The Trustee has set a Shortfall Limit in accordance with SPS 160 of 97% for the Defined Benefit plan. This means that between actuarial investigations, a restoration plan to restore the VBI to 100% is required when the Defined Benefit plan's VBI reduces to below 97%.

4.18 A Shortfall Limit is defined in paragraph 10 of SPS 160 as:

"the extent to which an RSE licensee considers that a fund can be in an unsatisfactory financial position with the RSE licensee still being able to reasonably expect that, because of corrections in the temporary negative market fluctuations in the value of fund assets, the fund can be restored to a satisfactory financial position within one year."

4.19 We believe that the current Shortfall Limit remains appropriate. We have considered that:

a The actual asset allocation retains an allocation to growth assets in the order of 74.2%, with 71.3% strategic asset allocation;

b Vested benefits are higher than Minimum Requisite Benefits; and

c The Authorities have a contractual obligation to pay contributions determined by the Trustee.

Section 5: Valuation Assumptions and Funding Method

5.1 An appropriate set of both financial and demographic assumptions must be determined before values can be placed on the Defined Benefit plan's liabilities and assets. The assumptions relating to benefit liabilities and assets are discussed under separate headings below.

5.2 In setting both the financial and demographic assumptions, the current COVID-19 pandemic has been considered and reflect known information.

Valuation of Benefit Liabilities

5.3 The assumptions for this actuarial investigation have been determined on a "best estimate" basis.

5.4 "Best estimate" describes assumptions which reflect "mean" estimates for the various factors, rather than choosing assumptions with explicit margins to cope with uncertainty about future experience. These "best estimate" assumptions might be described as being realistic. They are equally likely to prove to be conservative or to be optimistic and are less likely to be able to absorb fluctuations in future experience.

5.5 As the Defined Benefit plan is closed to new members and as a result has declining membership, "best estimate" assumptions continue to be relevant because using conservative assumptions would be expected to eventually result in excess assets. Best estimate assumptions are also required by the Actuaries Institute's Professional Standards.

5.6 Appendix C contains a summary of the assumptions used.

Key Financial Assumptions

5.7 Financial assumptions for investment earnings, salary inflation and pension increases are required to value the liabilities.

5.8 The factor of major significance in the investigation of the Defined Benefit plan's active member benefit liabilities is the differential between the assumed future rate of investment earnings and the assumed rate of salary growth due to inflation. (These factors are almost exactly compensating in their effect upon the present value of the employed members' Defined Benefit plan's future benefit liabilities - hence, the difference between the rates is important, rather than their absolute values.)

5.9 For valuing the current pensioner liabilities, the differential between investment earnings and the rate of price inflation is relevant because pensions are indexed semi-annually to the change in the Consumer Price Index (CPI). The historical long-term differential between the changes in CPI and AWE (salary inflation) has generally ranged between 0% and 2% p.a.

5.10 The "best estimate" financial assumptions adopted at the 30 June 2020 actuarial investigation were:

- 3.1% p.a. for two years and 2.85% p.a. thereafter real investment return over salary inflation. This comprised a 5.6% p.a. net of tax investment return assumption and a 2.5% p.a. for two years and 2.75% p.a. thereafter salary inflation assumption.

- 4.5% p.a. real investment return over price inflation. This comprised a 6.5% p.a. gross of tax investment return and a 2.0% p.a. CPI assumption.

5.11 The “best estimate” financial assumptions adopted for the 30 June 2021 investigation have been updated to reflect the most recent capital market assumptions and current asset allocation from the Fund’s asset consultant, Frontier. The “best estimate” financial assumptions adopted in this valuation are:

- 2.0% p.a. real investment return over salary inflation. This comprised a 4.75% p.a. net of tax investment return assumption and a 2.75% p.a. salary inflation assumption.
- 3.25% p.a. real investment return over price inflation. This comprised a 5.5% p.a. gross of tax investment return and a 2.25% p.a. CPI assumption.

5.12 The investments for fixed term pensions are matched to the liabilities by investing in fixed interest securities including CPI linked bonds. Based on current CPI indexed bond interest rates a real discount rate (i.e. discount rate above CPI) of 0.5% has been assumed. This discount rate includes a reduction of 0.75% to allow for investment management fees and administration costs.

5.13 These assumptions have been set after consideration of the return expectations of Vision Super’s investment consultants.

Taxation

5.14 The assumed investment earning rate in respect of pension liabilities is gross of tax on investment income because no investment tax is paid on assets used to provide pensions. The assumed investment earning rate for active members and deferred beneficiaries is net of tax on investment income. A difference of 0.75% p.a. is assumed between the gross of tax and net of tax investment earning rate. This difference reflects that the tax on investment income for active members and deferred beneficiaries is generally less than 15% due to imputation and franking credits, capitals gains discounts and other investment tax offsets.

Expenses

5.15 An analysis of expense data was undertaken in the previous triennial actuarial investigation at 30 June 2020. The expense assumptions adopted for this review are consistent with those adopted for the 30 June 2020 triennial actuarial investigation.

Demographic Assumptions

5.16 An analysis of the Defined Benefit plan’s demographic experience was undertaken at the previous triennial actuarial investigation at 30 June 2020. This analysis was undertaken within the previous three years and it is not expected that there has been any significant change to the demographic experience since then. Therefore, for the purpose of this actuarial investigation, I have retained the demographic assumptions from the previous actuarial investigation. Appendix C summarises the demographic assumptions adopted for this investigation.

Benefits

5.17 The benefits which have been valued are summarised in Appendix A. Members of the Defined Benefit plan on 25 May 1988 have certain guarantees or options in relation to benefits provided under the 1958 Act. As per the 30 June 2020 triennial actuarial investigation, we have assumed that 60% of eligible retirees, who joined the Defined Benefit plan prior to 25 May 1988, elect to take the pension option and 45% of eligible deferred beneficiaries elect to take the pension option. It has also been assumed that 80% of those who resign will take the deferred benefit option. We have made no allowance for any other guarantees and options these members may be entitled to, as we continue to believe they are not likely to have a material impact on the results of this investigation.

Actuarial Funding Method

5.18 In recommending a funding plan which aims to be sufficient to fund the members' benefits in the long-term, it is necessary to project the operation of the Defined Benefit plan into the future, using the actuarial assumptions set out above.

5.19 Briefly the projection operates in the following manner:

a project total benefits and expenses expected to emerge in all future years in respect of current members, deferred beneficiaries and pensioners. The projection is based on the long-term actuarial assumptions including allowance for the contingencies under which benefits can be paid (retirement, death, disablement and resignation), salary and pension increases;

b discount these projected benefits to a present value at the assumed long-term investment return;

c in a similar manner to (a) and (b), project the ongoing employer contribution and member contributions over all future years for current members, and discount them to present values; and

d determine the additional funding required by the Authorities by comparing (b) with (c) plus the appropriate value of the assets at the investigation date.

5.20 This projection is known as the aggregate funding method, which is considered to be appropriate for a closed fund. The purpose of the calculation is to assess if the existing contribution rates and assets are sufficient to provide all future benefits on current assumptions.

5.21 Under SPS 160, APRA requires superannuation funds to put in place a plan that is expected to fully fund their vested benefits within three years if the fund's assets are less than the vested benefits at an actuarial investigation, also known as being in an "Unsatisfactory Financial Position". A funding plan is also required when the VBI reduces to below the shortfall limit, currently 97%, between actuarial investigations.

5.22 The shortfall or surplus relative to vested benefits is likely to vary from the actuarial shortfall or surplus calculated using the method set out in 5.19. It is possible that the recommended funding amount under this funding method may not be sufficient to be expected to maintain the Defined Benefit plan's Vested Benefits Index (VBI) to 100% within the timeframe required by APRA if it is below 100%. In this situation additional contributions would be recommended as required by APRA.

5.23 Additional contributions can be made to target a VBI of 100% but where these contributions are higher than any actuarial shortfall calculated using the aggregate funding method described above a surplus would be expected to result in the long term if experience is as expected. Vision Super may also be able to manage any such shortfalls or surpluses through a combination of changes to funding and investment strategy.

5.24 In the next section we review the financial position as at 30 June 2021 and in Section 7 we discuss the adequacy of the long term funding arrangements.

Section 6: Financial Position of Defined Benefit Plan

6.1 The financial position of the Defined Benefit plan at the investigation date provides some insight into the progress towards fully funding members' benefits in the long-term.

6.2 A convenient means of assessing the financial position of the Defined Benefit plan involves the calculation of various indices of benefits compared to assets.

Vested Benefits Index

6.3 The first of the indices is the "Vested Benefits Index" (VBI). Vested Benefits are defined as the benefits that would be due and payable if all the members voluntarily terminated their service with their employers at the investigation date.

- For active members, the Vested Benefits are the resignation benefit or the early retirement benefit (if aged 55 or more). Upon resignation from LASF, a member has the choice of an immediate lump sum or a more valuable deferred benefit. Also, upon retirement certain members have the option of taking a pension. In calculating the vested benefits, we have allowed for the best estimate assumption regarding the take up of deferred benefits and pensions.
- For deferred beneficiaries, the vested benefit will be the present value of the liabilities, allowing for the pension take up rate.
- For pensioners, the vested benefit is the present value of expected future pension payments.

6.4 The Vested Benefits Index is calculated as follows:

$$\text{VBI} = \frac{\text{fair value of assets}}{\text{total of vested benefits}}$$

6.5 The Vested Benefit Index as at 30 June 2021 is:

VBI as at 30 June 2021	
Defined Benefit plan assets ($m)	$2,413.5
Vested Benefits ($m)	
Active Members	$1,009.2
Life-time Pensioners	$841.0
Fixed term Pensioners	$0.9
Deferred beneficiaries	$347.7
Total Vested Benefits	$2,198.8
Vested Benefit Index	109.8%

6.6 The calculated VBI for the Defined Benefit plan at 30 June 2021 is 109.8%. This compares with a VBI of 104.6% at the 30 June 2020 investigation. The Defined Benefit plan was not in an unsatisfactory financial position as at 30 June 2021.

6.7 The VBI for the Defined Benefit plan has increased since 30 June 2020 mainly due to the financial experience (excess of investment return above salary increase) being significantly better than assumed. The change in financial assumptions offset some of this increase.

Discounted Accrued Benefits Index

6.8 Discounted Accrued Benefits means the present value of the benefit payable in the future (based on the assumptions) accrued in respect of service to the investigation date. The method of apportioning active members' benefits to past service for the main Defined Benefit plan is as follows, effectively recognising the portion of future benefits arising due to service to date:

a Retirement, disablement and deferred resignation– the past service benefit (based on accrued lump sum multiples and accrued pensions where relevant) at the calculation date, with allowance for future salary growth to the assumed exit date.

b Death benefits – the total projected death benefit at the assumed exit date multiplied by the ratio of service to the calculation date divided by service to the retirement date.

c Immediate Resignation Benefit – the past service benefit at the calculation date (based on the multiples at the calculation date) with allowance for future salary growth up to the assumed resignation date.

6.9 The Discounted Accrued Benefits are not subject to a minimum of the Vested Benefits.

6.10 The index is more a measure of the Defined Benefit plan's on-going capacity to meet Accrued Benefits in the long run.

6.11 The "Discounted Accrued Benefits Index" (DABI) is calculated as follows:

$$\text{DABI} = \frac{\text{fair value of assets}}{\text{total of discounted accrued benefits}}$$

6.12 The Discounted Accrued Benefit Index as at 30 June 2021 is:

DABI as at 30 June 2021	
Defined Benefit plan assets ($m)	$2,413.5
Discounted Accrued Benefits ($m)	
Active Members	$938.4
Life-time Pensioners	$841.0
Fixed term Pensioners	$0.9
Deferred beneficiaries	$347.7
Total Discounted Accrued Benefits	2,127.9
Discounted Accrued Benefit Index	113.4%

6.13 The calculated DABI for the Defined Benefit plan at 30 June 2021, based on the “best estimate” assumptions, used in this investigation, is 113.4%. The DABI was estimated to be 110.7% at the 30 June 2020 investigation. The increase in DABI was mainly due to the better than expected investment return during the year, partially offset by the changes to financial assumptions.

6.14 Because the DABI is more than 100%, it means current assets are expected to be sufficient to provide the benefits of members’ accrued benefits based on service to 30 June 2021.

Minimum Requisite Benefits Index

6.15 We have also considered the asset coverage of members’ Minimum Requisite Benefits.

6.16 The Minimum Requisite Benefits (MRBs) are the minimum amount of benefit that must be provided to enable Authorities to satisfy their Superannuation Guarantee obligations. The method to calculate the amount of MRBs for the active members is specified in my Benefit Certificate dated 23 October 2018.

6.17 The MRBs for Defined Benefit active members have been configured on the administration system. We have therefore used the MRB data provided by the administrator for the purposes of this valuation.

6.18 In relation to the determination of the MRBs for deferred beneficiaries and pensioners, DLA Piper has advised that the MRB should be crystallised when members cease to be an employee and there was no basis to adopt a higher benefit beyond their MRB entitlements.

6.19 In accordance with this legal advice, we have estimated the MRBs for these members on the following basis:

a For deferred beneficiaries, their MRBs has been calculated as the following amounts (plus interest):

i. For members who resigned prior to 1 July 2013, the immediate cash resignation benefit, as the MRB was defined as equal to this amount in the Benefit Certificate applicable at that time;

ii. For members who resigned from and after 1 July 2013, the MRB is expected to be different to the immediate cash resignation benefit. We understand that the resignation benefits provided by Vision Super have already been subject to a minimum of the MRB, if this minimum applies. Hence we have assumed that the MRB is equal to the resignation benefit provided, which will overstate the estimated MRB where the actual MRB is less than the immediate resignation benefit. We do not think this will materially overstate the amount of the MRB.

b For the current pensioners who retired after 1992 (since the introduction of the Superannuation Guarantee legislation), their MRBs are expected to be less than their retirement benefits; whereas for those current pensioners who retired prior to 1992, their MRBs are assumed to be their retirement benefit. On retirement, all Defined Benefit plan members are required to take at least half of their benefit as a lump sum, which means that the portion of the pension that is funded by the MRB will often be low. Vision Super is unable to provide information regarding members’ MRB at the time of retirement. For the last actuarial investigation, we estimated that the proportion of MRB benefits relative to the retirement pensions was of the order of 70% for all current pensioners. We have retained this assumption for this actuarial investigation. Vision Super has advised that it has recently completed the configuration of the MRB for pensions on its administration system and they are expected to be available at the next actuarial investigation.

6.20 The Minimum Requisite Benefit Index is calculated as follows:

$$\text{MRBI} = \frac{\text{fair value of assets}}{\text{total of Minimum Requisite Benefits}}$$

6.21 The Minimum Requisite Benefit Index as at 30 June 2021 is:

MRBI as at 30 June 2021	
Defined Benefit plan assets ($m)	$2,413.5
Minimum Requisite Benefits ($m)	
Active Members	$673.1
Lifetime Pensioners	$588.7
Fixed term Pensioners	$0.9
Deferred beneficiaries	$333.2
Total Minimum Requisite Benefits	1,595.9
Minimum Requisite Benefit Index	151.2%

6.22 As at 30 June 2021 we estimate that the ratio of the market value of assets to the amount of Minimum Requisite Benefits was approximately 151.2%. This compares with a MRBI of 142.2% at the 30 June 2020 investigation. The increase in MRBI was mainly due to the better than expected investment return during the year, partly offset by the change in financial assumptions.

6.23 In accordance with the legal advice from DLA Piper, this ratio has been calculated including the pension MRBs and the deferred MRBs in the total of MRBs (rather than a deduction from the fair value of assets).

6.24 If this ratio for the entire Fund falls to below 100%, it becomes Technically Insolvent as defined in the SIS Regulations. If this occurs the Trustee must take certain steps to restore solvency. The Trustee needs to continue to monitor the "Notifiable Events" defined in the Funding and Solvency Certificate to identify if the Fund is at risk of becoming, or becomes, Technically Insolvent so appropriate action can be taken.

Other Measures of Financial Position

6.25 In accordance with Clause A.21.1(a) of the Trust Deed, an Authority requires the approval of the Board to terminate its contributions to the Defined Benefit plan. We assume this approval would not be provided unless any future funding risk is adequately managed. Also, in accordance with Clause A.21.1(b), such an Authority remains responsible for its share of any actuarial shortfall.

6.26 However, if an Authority does terminate its contributions, Clause A.21 of the Trust Deed states that:

> *"the Trustee, after obtaining the advice of the Actuary and subject to A.21.5, may adjust any benefit which is or may become payable to or in respect of any person whom the Trustee may consider is affected by that termination to the extent and in the manner the Trustee considers appropriate and equitable"*

6.27 Further it states in Clause A.21.5 that:

> *"…Unless otherwise agreed between the Trustee and the Employer, an adjustment made …must not increase the amount of any benefit which, in the opinion of the Trustee after obtaining the advice of the Actuary, has accrued in respect of a person immediately prior to the effective date of that adjustment in respect of the period up to that date or improve the basis upon which benefits accrue during or in respect of any period after that date."*

6.28 Therefore, in the case of the termination of contributions by one or more Authorities the Trustee has some flexibility in respect of the benefits provided, subject to superannuation law, and there is no alternative measure of financial position that needs to be calculated in respect of this situation.

6.29 On retrenchment, members' are entitled to an accrued retirement benefit. For members over age 55 this is equal to their vested benefit (i.e. retirement benefit) but for members under age 55 it will be higher than their vested benefit. For active members, retrenchment benefits as at 30 June 2021 were $1,020.2 million. As at 30 June 2021, the ratio of the market value of assets to the amount of retrenchment benefits was 109.2%. This ratio includes the value of pensioner and deferred beneficiaries' benefits. The corresponding index as at 30 June 2020 investigation was 103.9%. This increase in the index was mainly due to achieving greater investment returns than expected.

6.30 An additional contribution may be required from the relevant Authority in respect of each retrenchment under the current funding plan so that there is no additional financial strain on the Defined Benefit plan.

6.31 The liabilities of pensioners used to determine all of the funding measures have been calculated using the funding assumptions and assuming the liabilities will be met by continuing to make pension payments until all pensioners have died. It should be noted that if the current pension liabilities were to be transferred to a life insurance office, the assets required to be transferred could be significantly higher than the amount of the vested benefits calculated in this investigation because the assumptions used for this purpose would need to be calculated consistently with the capital adequacy requirements of life insurance offices. The 30 June 2020 triennial actuarial valuation estimated that such a transfer would reduce the VBI by approximately 19%.

6.32 In Appendix D the Defined Benefit plan's asset allocation is shown and there is currently a 23.4% allocation to illiquid assets. The funding indices have been calculated based on the valuation of these assets at fair market value from the 30 June 2021 unaudited financial statements (excluding disposal costs). In the unlikely event that these assets had to be quickly liquidated it is possible that this could occur at discounted values resulting in lower funding ratios. For example, a 20% discount on forced sale of illiquid assets would reduce the funding indices by approximately 5%.

6.33 The Authorities have ten years to make each of the three lump sum contributions requested by Vision Super as at 30 June 1997, 30 June 2002 and 30 June 2012 and fifteen years to make the contributions requested as at 30 June 2013. Outstanding amounts are included in the fair value of assets as contributions receivable. If these amounts are not paid the funding position would be worse than set out in this report. We have been advised by Vision Super that the vast majority of the outstanding amounts have been received by 30 June 2021.

6.34 The VBI and DABI would increase (or decrease) if a lower (or higher) proportion of employee members were assumed to defer upon resignation or take a pension upon retirement. In the 2020 triennial actuarial investigation, we reported that if it was assumed that 100% of eligible members elected the pension option and 100% of resigning members elected the deferred option, the impact on the VBI and the DABI would be a reduction of 3% and 2% respectively. We do not expect these sensitivities to have changed materially since 2020.

6.35 There was no material deferred tax asset in the Fund as at 30 June 2021. Therefore, the funding is not significantly dependent upon being able to utilize such an amount.

Probability of making Pension Payments

6.36 In order to satisfy the requirements of SPS 160 to provide an opinion of whether at 30 June 2021 “there is a high degree of probability that the fund will be able to pay the pensions as required under the fund’s governing rules”, without any clear priorities for benefits being specified in the Fund Trust Deed, we looked to the following points in relation to contributions:

a As envisaged by Circular 12/97 (issued by the Board under the 1988 Act), any future funding shortfall arising from pension liabilities can be funded under the Unfunded Liability Amount provisions in the Trust Deed.

b Under Part A.21 of the Fund’s Trust Deed, participating employers are generally able to terminate their contributions to the Fund at any time. However:

i. Under clause A.21.1(b), a participating employer in Division C (the Defined Benefit plan) with an “Unfunded Liability Amount” is not able to terminate contributions. The “Unfunded Liability Amount” is the amount identified in respect of each participating employer using the methodology set out in Circular 12/97.

ii. A participating employer without an “Unfunded Liability Amount” is able to terminate contributions to the Fund under clause A.21.1(a) after giving 60 days’ notice and obtaining the Trustee’s approval. Presumably, the Trustee would not give approval to terminate if there is an unfunded liability or material future funding risk.

c The Participating Employer Agreement signed by each defined benefit employer imposes a contractual obligation on that employer, in addition to the contribution requirements in the Trust Deed. The Agreement also provides that employers with Unfunded Liability Amounts cannot terminate contributions and that those who do not have an Unfunded Liability Amount must follow clause A.21.1(a) of the Trust Deed.

d The combination of the Trust Deed provisions and the Participating Employer Agreements essentially mean that an employer cannot unilaterally cease contributions to the Fund unless it ceases to exist:

i. Under the terms of the Participating Employer Agreement, if such an employer does cease to exist, the terms of the Agreement are binding on that employer’s successor at law and that employer’s “Unfunded Liability Amount” obligation (if any) must be assumed by any successor body.

ii. If there was no direct successor, the Trustee could initiate action to identify a relevant successor (possibly the State Government as most, if not all, of these employers would be engaged in the provision of essential public services which the state is constitutionally bound to provide). Such a situation is expected to be very rare.

6.37 Legal advice has been obtained by the Fund from DLA Piper that confirms the Employers cannot avoid their contribution responsibilities. We have relied upon the legal advice.

6.38 When forming a statement of opinion in accordance with Professional Standard 410, the assets and future contributions from which future pension payments are assumed to be met need to be identified. Under normal circumstances, it is considered inappropriate to take future employer contributions into account when determining the assets available to cover pension payments. However, paragraph 25(a) of Professional Standard 410 provides allowance for future contributions to be taken into account in limited circumstances, in order to form a positive opinion.

6.39 We believe that the historical circumstances of Vision Super's funding arrangements fall within the scope of the 'limited circumstances' referred to in paragraph 6.2 of PS 410.

6.40 For much of its history, Vision Super was a public sector fund and was operated on a pay-as-you-go basis rather than on a fully funded basis. It has only been a Regulated fund under SIS since 1 July 1998 and employers remain public sector employers.

6.41 Changes to the Fund benefit design and funding policy in 1988 included a process to eventually achieve full funding of the accrued benefit liabilities, including the pension liabilities.

6.42 To achieve this full funding target over time, the contractual contribution arrangements outlined above were instigated.

6.43 In conclusion, this analysis allows us to confirm that in our opinion there is a high degree of probability that the Defined Benefit plan will be able to pay the pensions required under the Trust Deed.

Section 7: Assessing the adequacy of the Funding Arrangements

The Present Funding Arrangements

7.1 The Authority funding arrangements for the Defined Benefit plan recommended in the previous triennial actuarial investigation comprise the following components:

a contributions in respect of each Authority's share of any funding short fall that arises. This has included:

- $321 million unfunded liability at 30 June 1997, plus contribution tax; and
- $127 million unfunded liability as at 31 December 2002, plus contribution tax;
- $71 million unfunded liability as at 31 December 2008, plus contribution tax (this amount plus interest was invoiced at 30 June 2012);
- $406 million unfunded liability as at 31 December 2011, plus contribution tax and interest from 31 December 2011. This was $453 million (plus contribution tax) as at 30 June 2013.

b An additional contribution to cover the excess of the benefits paid as a consequence of retrenchment above the funded resignation or retirement benefit (the funded resignation or retirement benefit is calculated as the VBI, capped at 100%, multiplied by the benefit), plus contribution tax; plus

c An ongoing Authority contribution rate based on current members' salaries, needed to fund the balance of benefits for current members and pensioners at 9.5% of salaries from 1 July 2014 and increases with legislated increases in the Superannuation Guarantee Charge; plus

d Additional top up contributions that may be required in the future so that Defined Benefit plan is no longer in an unsatisfactory financial position.

Authorities also need to contribute the amount of members' salary sacrifice contributions.

7.2 The final component of this funding plan is consistent with the funding requirements of SPS 160 because it refers to additional top-up contributions to restore the VBI to 100%. SPS 160 requires restoration plans to be developed to restore the VBI to 100% within three years, when prescribed circumstances apply. The prescribed circumstances are a VBI below the Trustee adopted shortfall limit (i.e. currently 97%) at any time or below 100% at the date of an actuarial investigation or while an actuarial investigation is being undertaken.

7.3 Our calculations at 30 June 2021 using the "best estimate" funding assumptions show that the present funding arrangements are expected to be adequate to meet the expected Defined Benefit plan liabilities.

Total Service Liability Surplus/ Deficit as at 30 June 2021

7.4 As at 30 June 2021 there was a total service liability surplus of $270.3 million. This means that the current value of assets plus expected future contributions is more than the value of expected future benefits and expenses by $270.3 million, assuming that the Authorities contribute at a rate in line with the currently legislated Superannuation Guarantee Charge as a percentage of salaries (i.e. currently 10.0% of salaries but increasing in the future). Full details of these calculations are set out in Appendix E.

7.5 The total service liability surplus as at 30 June 2020 was $200 million. The actuarial surplus has increased over the year mainly due to financial experience (excess of investment return above salary increase and price inflation) being significantly higher than assumed. The changes to financial assumptions have partially offset the increase.

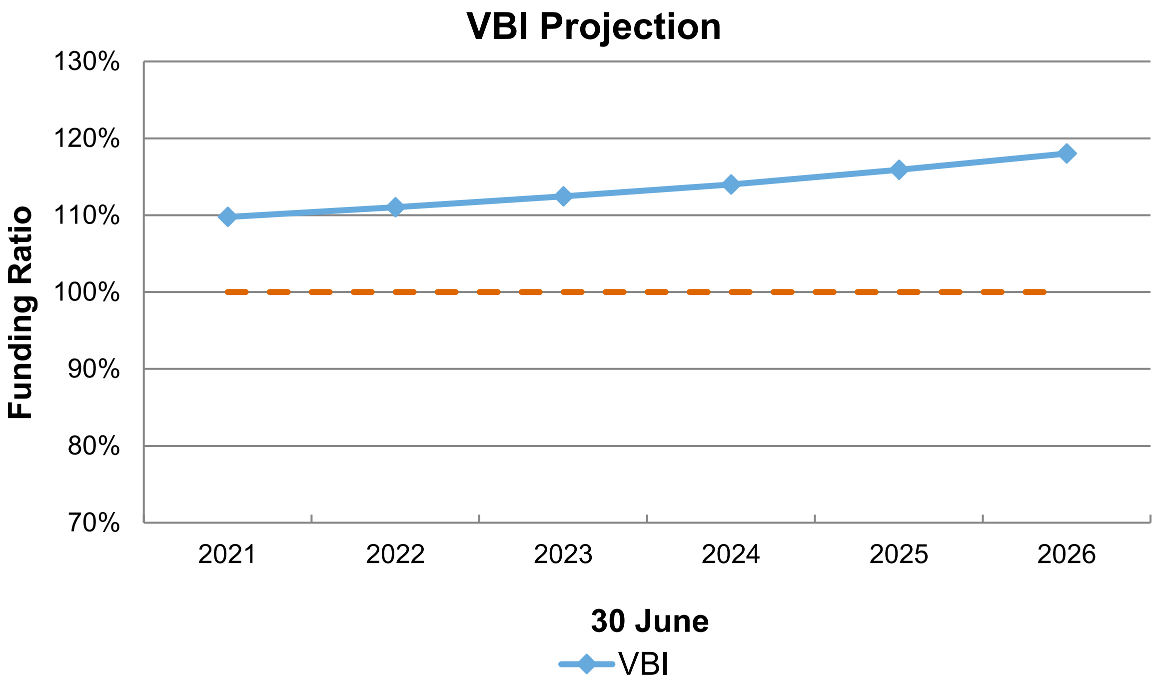
7.6 The existing funding arrangements are expected to be adequate if the current assumptions are borne out in practice. In fact, the total service liability surplus of $270.3 million is higher than the expected value of all future Authority contributions (less tax) of $71 million (refer to Appendix E). This means that if experience is as expected from 30 June 2021, Authorities would not need to make any further contributions to the Defined Benefit plan. The long term Authority contribution rate implied by the aggregate funding method would be zero.

7.7 Nevertheless, it needs to be recognised that the ultimate cost of benefits for members of the Defined Benefit plan will depend on the actual future experience of all the relevant factors (investment earnings, salary growth, pensioner mortality, turnover rates, etc.). Therefore, the contribution arrangements will need to be varied as the actual experience unfolds.

Projection of Funding Levels

7.8 This section considers the adequacy of the funding by projecting the Defined Benefit plan's future funding level. This projection is based on the "best estimate" funding assumptions set out in Appendix C.

7.9 The graph below shows the projected Vested Benefits (VBI) of the Defined Benefit plan for the next five years.



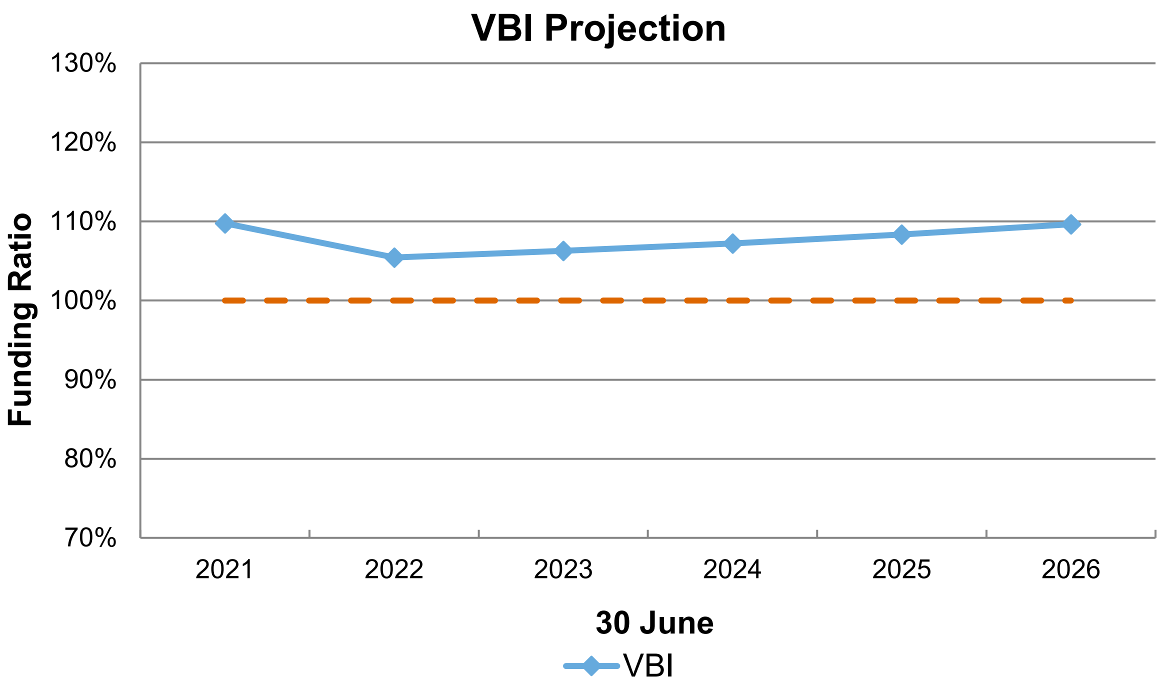
7.10 The chart shows the VBI is expected to stay above 100% over the next five years and hence no additional contribution is expected to be required from the Authorities to meet the funding requirement under SPS 160. However, in practice actual experience will be different to what is expected and the VBI may decrease or increase more quickly than expected.

7.11 The above chart shows that the VBI is expected to slowly increase over time. This is consistent with the total service liability surplus of $270.3 million at 30 June 2021.

Other Funding Issues

7.12 The Defined Benefit plan is mature and its funding is very sensitive to future experience. A lower than expected investment return would significantly reduce the “actuarial surplus”.

7.13 The chart below shows the impact on the VBI in an adverse scenario where the return is 0% for the year to 30 June 2022 and all other experience is as expected. A best estimate return of 4.75% p.a. (net of tax) is assumed from 1 July 2022.



7.14 If the return is 0% in 2021/22, the VBI is expected to fall to 105%. In the event of large negative return, however, the VBI would likely fall to below 100% (i.e. an unsatisfactory financial position). If this occurred, additional employer contributions may be required to restore the Defined Benefit plan’s VBI to 100% within the legislated three years.

7.15 On the other hand, if experience is favourable, an even larger “actuarial surplus” could result. The Board would need to consider how to treat such an “actuarial surplus”. We understand that if this occurs any residual assets would eventually be distributed to relevant Authorities in accordance with Clause A.15 of the Trust Deed. The Board may also wish to consider adopting a more defensive investment strategy in order to reduce the investment risk.

Events since 30 June 2021

7.16 Vision Super has advised that the investment returns for the month of July 2021 for the Defined Benefit plan was 1.51% and 1.55% for the month of August 2021 (equivalent to 20.0% p.a.). This is higher than the expected return of 4.75% p.a. and therefore will have had a positive impact on the financial position. We expect the VBI of the Defined Benefit plan will continue to remain above 100%. This does not impact our recommendations.

7.17 The Superannuation Guarantee (SG) Contribution rate increased to 10% from 1 July 2021. We understand the Authorities increased the Division C contribution rate to reflect this change.

7.18 We are not aware of any other events subsequent to 30 June 2021 that would materially impact upon the results of the actuarial investigation of the Defined Benefit plan.

Recommendation

7.19 Section A.20.1 of the Trust Deed states:

> *"each Employer must contribute to the Fund in respect of a particular Employee at any particular time the amount or rate of contributions determined by the Trustee after obtaining the advice of the Actuary, including the Unfunded Liability Amount…."*

7.20 The VBI was 109.8% as at 30 June 2021 (refer Section 6.5). Given the current investment strategy and the VBI of 109.8%, the VBI could fall below 100% if experience is worse than expected. We therefore have recommended that the current contributions remain unchanged. In making this recommendation, we have also considered what we understand to be the preferences of the Trustee.

7.21 In summary, we recommend that the current funding plan continue, whereby the Authorities will pay:

a Contributions equal to 10.0% of salary for employee members, increasing with changes in the Superannuation Guarantee Charge;

b An additional contribution to cover the excess of the benefits paid as a consequence of retrenchment above the funded resignation or retirement benefit (the funded resignation or retirement benefit is calculated as the minimum of (100% and VBI) multiplied by the vested benefit), plus contribution tax;

c Outstanding contributions in respect of calls made at the previous actuarial investigations; and

d Additional top up contributions that may be required in the future if the plan is in an unsatisfactory financial position.

Authorities also need to contribute the amount of members' salary sacrifice contributions.

7.22 However, given the $270.3 million total liability surplus, these contributions are expected to be more than sufficient if future experience is as expected. In fact, if experience is as expected Authorities would not need to make further contributions. Hence, Vision Super could consider whether it is appropriate to further reduce investment risk which could be considered together with alternative funding plans.

7.23 It is very important to understand that each of the components of the funding arrangements is very dependent on the actual future experience of the Defined Benefit plan. Consequently all contribution components are subject to regular review by the Trustee using actuarial advice and could vary from the current recommendations at any time in the future.

Section 8: Insurance

Self Insurance Arrangements

8.1 The Defined Benefit plan provides death and disablement benefits that are significantly higher than the resignation/retirement benefits. The Fund self-insures this risk. This approach continues to be reasonable in light of the Defined Benefit plan's size, experience, present membership and benefit levels. The arrangements are reviewed annually as part of the actuarial investigations which is reasonable.

8.2 The death and disablement benefits are funded by the Authorities' contributions to the Defined Benefit plan. The total liability surplus calculated in Section 7 includes the expected death and disablement benefits. It is ultimately the Authorities that bear the financial risk if the amount of death and disablement benefits paid is significantly higher than expected.

8.3 The following table summarises the Defined Benefit plan's exposure to future service death and disablement risk as at 30 June 2021.

Self-Insurance exposure as at 30 June 2021	
Net Assets Available[1] (Defined Benefits plan assets available to meet benefits)	$1,223.9m
Expected Annual Future Service death and disablement benefits to be paid for 2021/22[2]	$0.9m
Total Future Service death benefits[3]	$171.8m

1. Active Defined Benefit plan assets excluding assets in respect of pensioners and deferred beneficiaries.
2. Based on assumptions adopted in this investigation.
3. The total amount of future service death benefits shown is the sum of individual death benefit in excess of the lesser of the value of the vested benefit and accrued retirement benefit for all active members. Future service disablement benefits are similar.

8.4 Because of the large number of members, it is unlikely that the actual future service death and disablement benefits (even if double the level expected) would place a significant additional financial strain on its funding.

8.5 The Defined Benefit plan also includes a temporary disability benefit. The funding of this benefit is allowed for approximately by a margin in disablement funding. If a disablement benefit is subsequently paid to the member, the amount of the disablement benefit is reduced by the amount of any temporary disability benefit payments.

8.6 The Defined Benefit plan's membership is spread throughout Victoria, reflecting the distribution of Authorities. There is a relatively low concentration of risk.

8.7 There is a very remote possibility of a catastrophe occurring. In the last triennial actuarial investigation as at 30 June 2020, we determined that in the event of a catastrophe that resulted in 100 additional death or disablement benefits being paid that the total claims would be around 1% of assets, which would be manageable given the current funding position.

8.8 While a larger catastrophe is possible the risk is extremely low. If the Trustee is concerned about the risk it could consider catastrophe insurance.

8.9 In the 30 June 2020 triennial actuarial investigation, we recommended an insurance reserve of $5.0 million be held by the Fund to cover the pending claims and incurred but not reported death and disablement claims.

8.10 We believe that this is still an appropriate allowance for use in this report as the self-insured portion of the death and disablement claims is expected to reduce over time as the employed members reduce in number and increase in average age. The total future service death benefits have reduced from $222.3 million as at 30 June 2020 to $171.8 million as at 30 June 2021. Unless we advise otherwise or a catastrophe event occurs, in our opinion, it will be sufficient to review the amount of the reserve in detail at the next triennial actuarial investigation in 2023.

8.11 In accordance with our recommendations in the prior actuarial investigation, we understand that Vision Super maintains an insurance reserve of $5.0 million for the Defined Benefit plan as at 30 June 2021. We recommend that this reserve be retained at this level.

Section 9: Material Risks

9.1 The funding of the Defined Benefit plan is dependent upon future experience. We have briefly considered below the material risks in respect of funding. If experience is materially adverse the Authorities will be required to make additional contributions.

Investment Risk

9.2 The most significant risk facing the Defined Benefit plans is that investment returns will not be as high as expected. There is also a risk a surplus could arise that could be difficult to utilize if not managed carefully. These risks occur because the income generated from the existing assets are not matched to the expected future benefit payments.

9.3 A change to the assumed investment return could also have a material impact on Authority contribution requirements in the short term, but would not be expected to impact the ultimate cost of funding benefits unless the change in assumption was because of change in investment strategy. This also applies for other assumptions.

9.4 As per current practice, the Trustee should continue to consider the liabilities and the funding position when determining the Defined Benefit plans' investment strategy.

Salary and Price Inflation Risk

9.5 Salary increases or price inflation exceeding expectations will have a negative impact on funding.

9.6 It is the excess of the investment return above the rates of salary and price inflation increases that is most important because the assets increase with the investment return and the liabilities with salary or price inflation.

Catastrophe Risk

9.7 The Defined Benefit plan self insures the death and disability benefits and is therefore subject to the risk of higher than expected claims. The self-insurance risk is considered in Section 8.

9.8 While the catastrophe risk is very low, particularly given the geographic spread of members, a high number of death or disability (or terminal medical condition) benefits caused by a single event or events is likely to put significant strain on the funding.

Pensioner Longevity Risk

9.9 At 30 June 2021 there were 4,124 life time pensioners in the Defined Benefit plan. There is a risk that pensioners may live longer than expected and this would have a negative impact on the funding position.

9.10 As at 30 June 2021 the assets held in respect of the 4 fixed term pensioners were broadly comparable to the liability associated with these pensioners. In our funding considerations, the fixed term pensioners are included as part of the Defined Benefit plan and Vision Super has confirmed that, if needed, the Defined Benefit plan's assets will be available to meet these liabilities.

Liquidity Risk

9.11 In Section 4 liquidity risk is discussed. Also, Section 6 considered the potential impact on funding of having to liquidate investments at a discount.

9.12 We understand that Vision Super considers the long term liquidity requirements in setting its strategic asset allocation and plans to reduce exposure to illiquid assets in the Defined Benefit plan to zero in the long term given the maturity of the plan. This remains appropriate.

Legislation Risk

9.13 There is a risk that legislation changes could impact on funding. For example:

a Changes to legislation may impact investment returns or other aspects of experience; and

b Changes to tax may impact funding.

Other

9.14 Operational risks (e.g. unit pricing and administration) are not considered in this report.

9.15 A higher proportion of members could elect to defer their resignation benefit or take a life-time pension than expected which would be expected to increase the cost of funding benefits.

9.16 There are many other risks in respect of the funding of the Defined Benefit plans but we have not included those that we do not consider to be currently material.

Appendix A: Summary of Benefits and Conditions

The benefits are set out in the Fund's Trust Deed. The Fund has been governed by the Trust Deed originally dated 26 June 1998 on and from 1 July 1998. The Trust Deed has subsequently been amended numerous times. This report is based on a copy of the Trust Deed including amendments up to 1 July 2014.

Membership

The Defined Benefit plan was closed to new members on 31 December 1993. From that date, new employees have joined Vision Super Saver, which provides accumulation style benefits.

The benefits and conditions described below relate to Defined Benefit plan members only.

Contributions

Members contribute at a rate of 6% of salary. Their contributions cease after 40 years of service. Authorities pay the balance required to provide the benefits.

Retirement Benefit

A lump sum benefit calculated as a percentage of final salary for each year (part years counting pro rata) of membership to retirement. The percentage is 21% for membership completed prior to 1 July 1993 and 18.5% for membership completed after 30 June 1993. A maximum of 40 years of membership counts towards the retirement benefit. Members may retire from age 55 and benefits cease to accrue at age 65.

Death Benefit

For members under 60 years of age, a lump sum of 21% of final salary for each year of actual and prospective membership to age 60. For members aged 60 or over, a lump sum of 21% of final salary for each year of actual membership. A maximum of 40 years of membership counts toward the death benefit.

Members with a medical classification of Grade B, C or D are entitled to a lower death benefit.

Total and Permanent Disablement Benefit

For members under 60 years of age, a lump sum equal to a percentage of final salary for each year of actual and prospective membership to age 60. The percentage is 21% for actual membership completed prior to 1 July 1993, 18.5% for actual membership completed after 30 June 1993, and 21% for prospective membership between the date of disablement and age 60. For members aged 60 or more, the benefit is a lump sum equal to the retirement benefit. A maximum of 40 years of membership counts towards the total and permanent disablement benefit.

"Disablement" generally means a continuous or recurring impairment of health of a member which renders him or her unable to perform his or her duties, or any other duties for which he or she is suited by education, training or experience, or would be suited as a result of retraining.

Members with a medical classification of Grade B, C or D are entitled to a lower disability benefit.

Ill-Health and Retrenchment Benefits

The accrued retirement benefit (i.e. counting membership to date of ill health or retrenchment).

There is also a Temporary Disability benefit.

Resignation Benefit

A lump sum of either:

a an immediate benefit equal to the sum of:

- 15% of final salary for each year (if any) of membership prior to 1 July 1993, excluding any portion of the last five years relating to pre 1 July 1993 membership;
- 13.5% of final salary for each year (if any) of membership after 30 June 1993, excluding the last five years;
- 9% of final salary for the last five years of membership; or

b a deferred benefit payable from age 55 equal to the accrued retirement benefit at the date of leaving, increased with the relevant investment return to payment after age 55.

Part of the immediate resignation benefit may be subject to preservation regulations.

"Old Benefit" Entitlements

Members who joined prior to 25 May 1988 have the option of taking up to 50% of their lump sum retirement benefits as a pension, based on prescribed conversion factors. The conversion factors reduce from 13.6 at age 55 to 12.6 at age 60 and 12.0 at age 65. This option also applies to members who joined prior to 25 May 1988 and elect to defer their benefit upon resignation until after age 55.

Certain other minimum benefits apply in respect of previous entitlements for certain groups of members.

Minimum Requisite Benefit

All benefits are subject to a minimum of the Minimum Requisite Benefit specified in the Benefit Certificate.

Appendix B: Membership Movements

Defined Benefit Plan

Membership as at 1 July 2020		1,954
Transfers/Rejoiners[1]		1
Exits		
Retirement, Resignations and retrenchments	250	
Death	3	
Total and Permanent Disablement	2	
Total exits		(255)
Membership as at 30 June 2021		**1,700**

[1]As advised by the Fund Administrator this member was originally classified as a pending exit but was subsequently transferred to a new Defined Benefit employer and re-instated as an active DB member.

Pensioners

Pensioners as at 1 July 2020	4,189
New pensioners	136
Pensions ceasing	(201)
Pensioners as at 30 June 2021	**4,124**

Appendix C: Summary of Valuation Assumptions

Financial Assumptions

The most significant financial assumptions are:

- Active members:
  - investment returns (net of tax and expenses) — 4.75% p.a.
  - salary inflation growth — 2.75% p.a.
- Pensioners:
  - investment returns (gross of tax; net of expenses) — 5.50% p.a.
  - CPI increases — 2.25% p.a.
- administration expenses: — 2.75% of salaries and 2.00% of pension

For Fixed term pensions a real investment return of 0.50%p.a. has been assumed.

Demographic Assumptions

Active Members

The table below illustrates the decrement rates assumed for active members. The decrement rates represent the percentage of members leaving the plan each year by each cause.

Year of Age	Deaths %	Disablements %	Resignations %	Retirements %
20	0.03	-	13.42	-
30	0.02	0.01	6.48	-
40	0.05	0.05	3.77	-
50	0.14	0.27	2.44	-
60	0.43	0.82	-	15.0
64	0.66	0.00	-	15.0

Pensioners – Defined Benefit plan

The table below illustrates the rates of mortality assumed for pensioners. The figures represent the percentages dying in the years of age shown.

Year of Age	Retirement /Spouse Male %	Disability Male %	Retirement /Spouse Female %	Disability Female %
60	0.49	1.26	0.30	0.58
65	0.73	1.95	0.45	0.99
70	1.16	3.00	0.76	1.68
75	2.11	4.56	1.40	2.84
80	3.99	6.84	2.77	4.74
85	7.81	10.06	5.73	7.73
90	14.43	14.39	11.60	12.18

Mortality improvement based on the 125-year experience from the Australian life tables 2015-2017.

Deferred Benefit Option on Resignation – Defined Benefit plan

It has been assumed that 80% of those who resign will take the deferred benefit option. Deferred benefits are assumed to be accessed at age 60.

Pension Option – Defined Benefit plan

It has been assumed that 60% of active members and 45% of deferred beneficiaries who joined the Defined Benefit plan prior to 25 May 1988 will elect to take the pension option upon retirement. Members who take this option are assumed to take 50% of their benefit as a pension.

Other Pension Assumptions

Males (pensioners or reversionary spouses) are assumed to be 3 years older than their female spouses. For current active members and deferred beneficiaries, the age based proportion married assumptions are applied at the date of commencement of a pension; for current pension members, the age based proportion married assumptions are applied at the date of the valuation.

Appendix D: Asset Allocation

Asset Class	Actual Asset Allocation 30 June 2021 (%)	Strategic Asset Allocation (%)
Australian Equity	24.5	22.5
International Equity	28.5	30.5
Private Equity	1.6	0
Property*	8.3	8.0
Infrastructure	8.4	8.0
Opportunistic Investments#	2.7	0
Alternative Debt	14.7	18.5
Fixed Interest	3.8	6.0
Cash	7.5	6.5
Total	**100.0**	**100.0**
Allocation to Illiquid Assets	23.4	25.8
Allocation to Growth Assets	74.2	71.3

* 2.3% of actual property is listed and liquid.

Includes Currency and Innovation and Disruption Asset Class.

Appendix E: Total Service Liability Surplus/(Deficit)

		($million)
Present Value of Active Member Liabilities		1,045.9
Retirement	981.7	
Death	22.9	
Disablement	24.2	
Resignation	17.1	
plus Deferred Beneficiary Liability		347.7
plus Present Value of Life Time Pensions		824.5
plus Present Value of fixed Term Pensions		0.9
less Family Offset and Surcharge Account balances		(6.8)
plus Present Value of Future Expenses		42.5
plus Allowance for tax on Contributions		4.3
Total Benefit Liability		**2,259.0**
Compared to:		
Assets		2,413.5
plus Value of ongoing member contributions (6%)		40.5
plus Value of ongoing Authority contributions (SG)		75.3
Total Assets		**2,529.3**
Surplus of Total Assets over Total Benefit Liability		270.3

Appendix F: Actuarial Statements required under SPS 160 Paragraph 23(a) – (h)

Defined Benefit Plan – Division C (LASF)

The following statements are prepared for the purposes of actuarial statements and Paragraphs 23(a) to (h) of SPS160. It relates to the Defined Benefit sub-plan with benefits specified in Division C of the Vision Super Trust Deed.

Background

The effective date of the most recent actuarial review of the Defined Benefit plan is 30 June 2021. The actuarial investigation was undertaken by Matthew Burgess, Fellow of The Institute of Actuaries of Australia, on behalf of Towers Watson Australia Pty Ltd (AFSL 229921).

This statement has been prepared for the Trustee of Vision Super as part of the actuarial investigation in accordance with the Professional Standards issued by The Institute of Actuaries of Australia.

Assets (SPS160 23(a))

The fair value of the Defined Benefit plan assets at 30 June 2021 was $2,413.455 million.

This value of assets at 30 June 2021 excludes amounts held to meet the Operational Risk Financial Requirement (ORFR) and was used to determine the required contributions.

Financial Condition SPS160 23(b)

The projected likely future financial position of the LASF Defined Benefit plan during the three years following the valuation date and based on my best estimate assumptions is as follows.

Date	Vested Benefits Index (%)
30 June 2021	109.8%
30 June 2022	111%
30 June 2023	112%
30 June 2024	114%

The projected financial position is shown only for the defined benefit members.

Accrued Benefits (SPS160 23(c))

Accrued Benefits have been determined as the present value of expected future payments arising from membership completed as at the review date plus any additional accumulation benefits at face value. Accrued Benefits have not been subjected to a minimum of vested benefits.

In determining Accrued Benefits, the major assumptions adopted were:

- 2.0% p.a. real investment return over salary inflation. This comprised a 4.75% p.a. net of tax investment return assumption and a 2.75% p.a. salary inflation assumption.
- 3.25% p.a. real investment return over price inflation. This comprised a 5.50% p.a. gross of tax investment return and a 2.25% p.a. CPI assumption.
- The investments for fixed term pensions are matched to the liabilities by investing in fixed interest securities including CPI linked bonds. Based on current CPI indexed bond interest rates a real discount rate (i.e. discount rate above CPI) of 0.5% has been assumed.

The future rate of investment return used to determine the accrued benefits is the anticipated rate of return on the Defined Benefit plan assets.

Assumptions were also made about rates members would withdraw from service because of death, total and permanent disablement and resignation. Under these assumptions, the average expected future membership period of the members is around 8 years.

The past membership component of all benefits payable in future from the Defined Benefit plan in respect of the current membership are projected forward allowing for future salary increases and then discounted back to the valuation date at the assumed rate of investment return.

Using the above method, the total value of accrued benefits and the fair value of the Defined Benefit plan assets at 30 June 2021 were:

Value of accrued benefits:	$2,127.9 million
Fair Value of Assets:	$2,413.455 million. The ratio of the actuarial value of the assets to the value of the total accrued benefits was 113.4% which indicates an adequate coverage of the value of the accrued benefits as at the date of the actuarial investigation.

In our opinion, the value of the assets of the Defined Benefit plan at 30 June 2021 was adequate to meet the liabilities of the Defined Benefit plan in respect of accrued benefits in the Defined Benefit plan. The assets are considered adequate in the longer term based on the contributions recommended below, and assumptions as to the future experience which we regard as appropriate.

Vested Benefits (SPS160 23(d))

Vested benefits are the benefits to which members would be entitled if they voluntarily left service.

At the date of the actuarial investigation, the total vested benefits and fair value of the Defined Benefit plan total assets were:

Total Vested Benefits:	$2,198.8 million
Fair Value of Assets:	$2,413.455 million

The ratio of the net market value of the Defined Benefit plan assets to total vested benefits was 109.8%, which indicates a satisfactory coverage of Vested Benefits as at the date of the actuarial investigation.

In our opinion, the Fund's financial position is satisfactory.

The Trustee has determined the short fall limit to be 97%. In my opinion this does not need to be reviewed.

Minimum Benefits and Funding and Solvency Certificates (SPS160 23(e) and (f))

Funding and Solvency Certificates (FSC) for the Fund covering the period from 1 July 2020 to 30 June 2021 as required by the Superannuation Industry (Supervision) Act have been provided.

In our opinion, the solvency of the Fund will be able to be certified in any Funding and Solvency Certificate required under the Superannuation Industry (Supervision) Regulations during the three year period to 30 June 2024 if experience is as assumed.

We note that for the purpose of issuing an FSC, the appropriate funding measure is in respect of coverage of minimum benefits (MRBs), which in this fund are considerably less than vested benefits, and are covered sufficiently by Defined Benefit plan assets. At 30 June 2021, the ratio of assets to MRBs is 151.2%. The total Minimum Requisite Benefits as at 30 June 2021 was $1,595.9 million.

Recommended Contributions (SPS160 23(g))

We recommend that the Authorities contribute the following amounts from 1 July 2021:

a Any outstanding unfunded liability from the 30 June 1997, 31 December 2002, 31 December 2008 and 31 December 2011 actuarial investigations; plus

b An additional contribution to cover the excess of the benefits paid as a consequence of retrenchment above the funded resignation or retirement benefit (the funded resignation or retirement benefit is calculated as the minimum of (100% and VBI) multiplied by the vested benefit), plus contribution tax; plus c 10.0% of members' salaries, increasing with increases in the Superannuation Guarantee Charge; plus

d Additional top up contributions that may be recommended in the future, if the Defined Benefit plan becomes in an unsatisfactory financial position.

Authorities also need to contribute the amount of members' salary sacrifice contributions.

The amounts of required contributions will be reviewed in the next triennial actuarial review of the Defined Benefit plan to be conducted with an effective date no later than 30 June 2023. An earlier actuarial review should be undertaken if there are any significant changes in the Defined Benefit plan.

Pensions (SPS160 23(h))

In our opinion, there is a high degree of probability that the Defined Benefit plan will be able to pay the pensions as required under the Defined Benefit plan's Trust Deed. We expect that this position will continue to be able to be certified during the three year period to 30 June 2024.

These statements can only be expressed as an expectation and not as a certainty because the future financial position of the Defined Benefit plan depends on unknown factors such as future investment returns, future Plan membership changes, etc.

Matthew Burgess

Matthew Burgess
Fellow of the Institute of Actuaries of Australia

Surath Fernando
Fellow of the Institute of Actuaries of Australia

7 September 2021