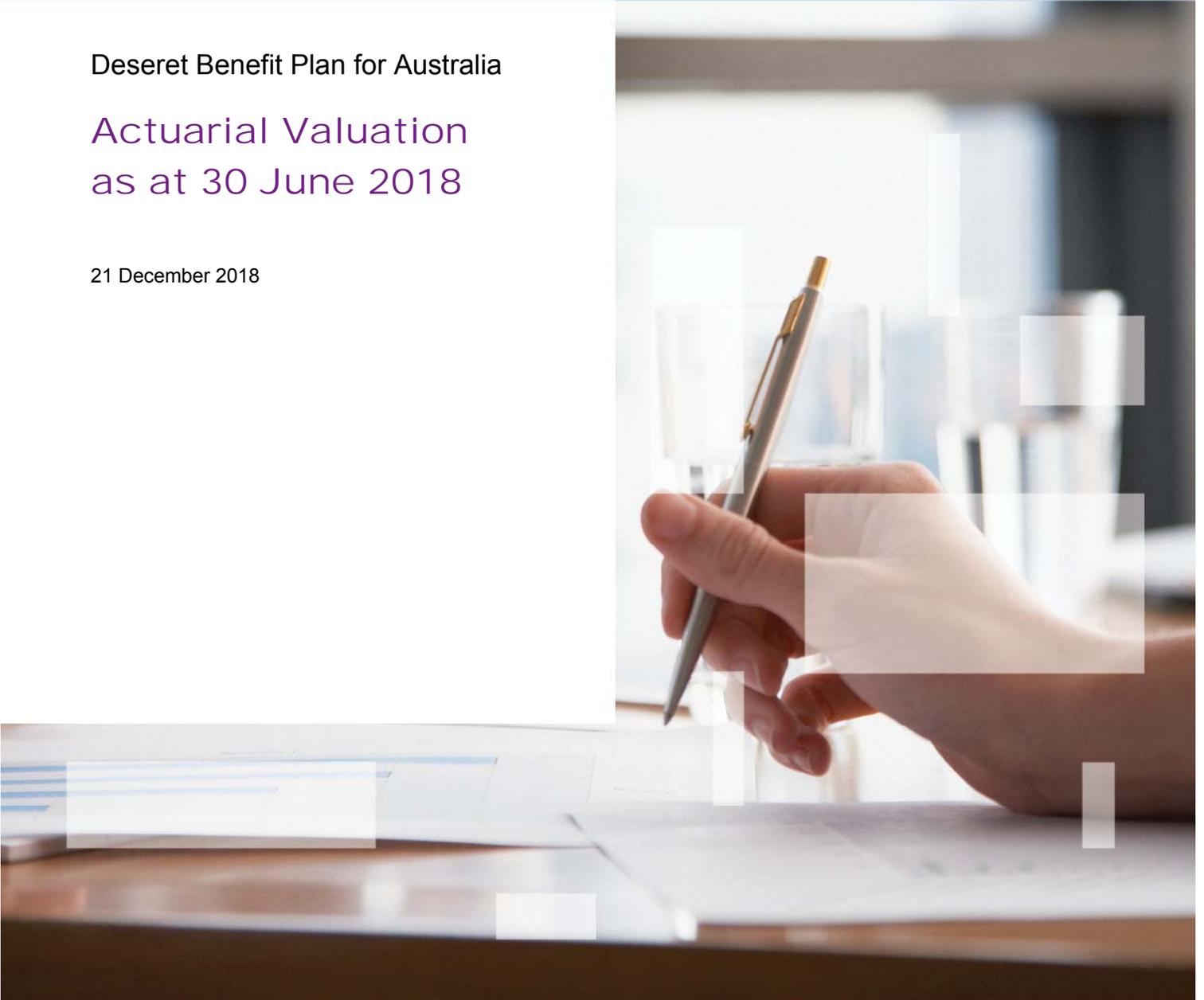


Deseret Benefit Plan for Australia

Actuarial Valuation  
as at 30 June 2018

21 December 2018





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## Section 1: Purpose and Summary

The Deseret Benefit Plan for Australia (“the Plan”) provides benefits which are of the “*defined benefit*” type where benefits provided on retirement are defined by Salary and period of membership. Accumulation benefits are provided to members leaving the Plan on resignation. Additional accumulation benefits are also available to members.

With such a plan, a regular actuarial review is necessary to:

- examine the sufficiency of the assets in relation to members’ accrued benefit entitlements
- determine the employer contribution rate required to ensure that the Plan maintains a satisfactory financial position
- examine the suitability of the Plan’s insurance and investment arrangements
- satisfy Rule 1.7(d) of the Trust Deed, and
- meet legislative requirements and prudential standard requirements, in particular paragraph 23 of prudential Standard 160 Defined Benefit Matters (“SPS160”).

This report has been prepared for the Trustees of the Deseret Benefit Plan for Australia, in my capacity as RSE Actuary to the Plan. The Effective Date of this actuarial valuation is 30 June 2018.

This report has been prepared in accordance with Professional Standard 400, dated June 2017, and Professional Standard 410 dated December 2017, issued by the Institute of Actuaries of Australia. The previous valuation, which I conducted, was carried out at 30 June 2015 with the results set out in a report dated 31 March 2016.

The next actuarial review will be as at 30 June 2021.

### Reliance statement and data

This report is provided subject to the terms set out herein and in our retainer agreement dated 31 March 2015 and the accompanying Terms and Conditions of Engagement. This report is provided solely for the Trustees’ use and for the specific purposes indicated above. It may not be suitable for use in any other context or for any other purpose.

Except where we expressly agree in writing, this report should not be disclosed or provided to any third party, other than as provided below. 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.

The Trustees may make a copy of this report available to their auditors and to LDS Australia, 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 Trustees' auditors in this regard. The Trustees should draw the provisions of this paragraph to their attention when passing this report to them.

In preparing this valuation, we have relied upon information and data provided to us orally and in writing by the Trustees and other persons or organisations designated by the Trustees. 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. The data and information we have relied upon is shown in Section 2.

In our opinion, all calculations are in accordance with requirements of applicable legislative requirements, and the procedures followed and the results presented conform to applicable actuarial standards of practice.

### **Employer Contribution recommendations**

In the absence of any special circumstances, we recommend that LDS Australia, and other participating employers, make the following contributions to the Plan:

#### **For the period 30 June 2018 to 30 June 2019**

- A minimum of 12.3% p.a. of Defined Benefit member Salaries; plus
- Additional contribution of \$400,000 p.a. for the year.
- Additional contribution of \$450,000 p.a. to fund the cost of expenses and insurance premiums.

#### **For the period 30 June 2019 to 30 June 2022**

- A minimum of 14.2% p.a. of Defined Benefit member Salaries; plus
- Additional contribution of \$750,000 p.a. with the aim of moving the Plan towards a Vested Benefits Index of 115%.
- Additional contribution of \$650,000 p.a. to fund the cost of expenses and insurance premiums.

We appreciate that these recommendations represent a substantial increase in contributions for LDS Australia, and we do not recommend such increases lightly, however we consider that they are reflective of the funding risks facing the Plan over the next 5 to 10 years as the Plan moves towards having 100% lifetime pensioners.

The funding position, and in particular the coverage of vested benefits by Plan assets, should continue to be monitored quarterly and each year at 30 June and more frequently if required. Additional supplementary contributions may be required should the vested benefits coverage position become unsatisfactory.

## Financial Position

Our investigation shows that the Plan is in a solvent financial position, that is, it meets the requirements of the superannuation guarantee. The Superannuation Industry (Supervision) Act (the SIS Act) requires statements to be made in respect of two measures of the financial position of the Plan, these measures being related to the current and projected “vested benefits” and the present value of the “accrued benefits” of members.

## Past Service Funding Indices

Vested benefits are the benefits payable if all Members voluntarily resign from service.

The present value of accrued benefits is the actuarial value (using the assumptions and methodology detailed in this report) of the expected future benefits payable from the Plan to the current members and their dependents in respect of Plan membership completed up to the date of the actuarial investigation.

The funding indices below ratio these amounts with the value of the Plan’s assets as at 30 June 2018 as follows.

	Defined Benefits Only* \$000's	All Benefits \$000's
Net Assets	28,779	33,158
Vested Benefits	27,043	31,423
Vested Benefit Index	106.4%	105.5%
Actuarial Value of Accrued Benefits	28,222	32,601
Actuarial Value of Accrued Benefits Index	102.0%	101.7%

\* The “Defined Benefits Only” figures illustrate the financial position of the Plan in respect of the Defined Benefit liabilities excluding additional accumulation accounts for defined benefit members. As a result, an amount in respect of accumulation liabilities (after an allowance for surcharge offset accounts) has been excluded from the Net Assets and the liabilities measures shown above.

As at the valuation date, the net assets of the Plan are sufficient to cover vested benefits. The ratio of the Plan’s assets to vested benefits for defined benefits only is 106.4% at 30 June 2018.

Assuming:

- The benefits described in the Trust Deed remain unchanged
- Employer contributions are paid at the recommended rate
- The future experience of the Plan is in accordance with the assumptions made in this actuarial valuation,

then the assets of the Plan should remain in excess of the vested benefits up to 30 June 2021. On this basis, the financial position of the Plan is expected to remain satisfactory.

The Plan's net assets are adequate to cover the present value of accrued benefits of all members of the Plan at the valuation date. The ratio of the Plan's assets to the present value of the accrued benefits for defined benefits only is 102.0%.

### **Minimum Benefits**

The Plan is "solvent" if the net realisable value of the assets of the Plan, less the value of the benefit entitlements of former members, exceeds the Minimum Requisite Benefits (MRB). Former members includes pensioners.

As at the valuation date the net assets of the Plan exceeded the MRBs and the Plan was in a solvent financial position. The ratio of the Plan's net assets supporting defined benefits to the defined benefits MRB was 113.6%.

### **Shortfall Limit**

As required under SPS 160 the Trustee has set the Shortfall Limit for the Plan at 97%. Given the current investment strategy, we consider this Shortfall Limit is appropriate for the Plan.

### **Market Valuation of Pensions**

Approximately 76% of the Plan's Defined Benefit Vested Benefits are assumed to be in the form of lifetime pensions. The actuarial valuation for these liabilities has been based on the Plan's expected return and future mortality rates and improvements. While we have not conducted an in depth exercise to find the exact relative market value of these liabilities we have estimated that the market value of these pensions to be around 15% to 25% higher than the liability held under the Plan's valuation basis. The impact of valuing pensions at market rates on the Plan's funding indices for defined benefits only would see the Vested Benefits Index fall to approximately 90% to 96% at the valuation date and the Actuarial Value of Accrued Benefits Index fall to approximately 86% to 92% at the valuation date.

### **Regulatory Requirements**

Prudential Standard SPS160, made under Section 34C of the Superannuation Industry (Supervision) Act 1993 requires certain specific information to be included in actuarial reports. A summary of this information is included in Appendix F to this report. Note that this is a summary only and, although the Trustee may choose to provide this summary to any members who request details of the actuarial valuation, members are entitled to request a copy of the full report.

### **Superannuation Guarantee**

LDS Australia's Superannuation Guarantee obligation is fully met for all Members by the minimum benefits provided under the Plan. The required Benefit Certificate is dated 21 January 2015 and a Funding and Solvency Certificate dated 7 July 2016 has been issued to the Trustee corresponding to this Benefit Certificate.

The purpose of this certificate is to specify the required Employer contributions needed to fund the minimum benefits used to offset the Superannuation Guarantee charge. All necessary funding and solvency certificates have been issued to the trustee during the three years to 30 June 2018. A superannuation fund is “*solvent*” if the net value of its assets, less the value of the benefit entitlements of former members, exceeds the minimum Superannuation Guarantee benefits. At 30 June 2018, the Plan is solvent and based on the actuarial assumptions, we see no reason why it would be unlikely that an actuary will not be able to certify the solvency of the Plan in three years’ time on this basis.

## Investments

The Trustees have developed formal objectives and a policy for the investment of the Plan’s assets. These objectives and policies are summarised in the Investment Governance Framework dated November 2018.

At 30 June 2018, the investment policy was to have the assets supporting the Plan’s defined benefit liabilities invested 60% in growth assets such as shares and property, 20% in diversifying assets and 20% in income assets such as fixed interest. The same strategy is used for both lifetime pensioners and active defined benefit employees.

The current investment policy is considered suitable for the Plan’s liabilities in respect of active defined benefit membership at 30 June 2018, and we consider the investment strategy for pension assets to be also appropriate, provided the employer accepts the funding risks associated with the strategy. However, as the pension assets continue to increase as a proportion of defined benefit liabilities, we recommend that the investment strategy for pension assets be reviewed and formally re-confirmed by the Employer.

The funding position at 30 June 2018 may not permit a de-risking of the investments backing the pension liabilities without significant additional employer funding, however a de-risking strategy should be considered by the employer in conjunction with the investment strategy review for pensions.

The Trustees regularly monitor the investment managers’ performance and we recommend that this continues.

## Insurance

In comparison with the Plan’s assets the total amount of insurance protection against death and total and permanent disablement benefits is adequate as at 30 June 2018. We will continue to monitor this situation when the annual administration review is performed each year.

The temporary disablement benefit is fully insured, hence the amount of insurance is not influenced by the level of the Plan’s assets.

## Defined Benefit Pensions

In accordance with 23(h) of SPS160, and Professional Standard 410, dated December 2017, issued by the Institute of Actuaries of Australia, the Actuary is required to make an opinion on the probability of the Plan being able to meet the pension payments in respect of members currently in receipt of pensions.

In my opinion, as at 30 June 2018, given the recommended Target Funding Level of 115%, I consider that there is a high degree of probability, at least 70%, that the Plan will be able to meet the pension payments in respect of the members currently in receipt of pensions as required under the Plan's Trust Deed and Rules.

## Next Valuation

The next valuation should be held no later than 30 June 2021. Vested Benefits coverage should continue to be monitored quarterly and more frequently if warranted.



**Phil Patterson**  
Fellow of The Institute of Actuaries of Australia

21 December 2018

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## Section 2: Background and Data

### Background

The Plan was initially established in accordance with the Trust Deed dated 14 March 1978 and is now governed by a Trust Deed and Rules dated 14 April 2006 and subsequent amendments.

Under Clause 1.17(a) of the Trust Deed, the Employer is required to contribute the amount or rate of contributions determined by the Actuary or such other amounts or rates decided by the Principal Employer and advised to the Trustee and the Actuary.

The Plan is a regulated complying superannuation fund under the SIS Act and for taxation purposes.

The Plan has been closed to new entrants since 31 December 2012.

A summary of the main provisions of the Trust Deed incorporating all amendments made to date, is included as Appendix A to this report.

### Previous Recommendations

The contributions paid to the Plan over the three year period since 30 June 2015 by LDS Australia and other participating employers, have been in line with the following recommendations from the previous valuation:

- A minimum of 12.3% p.a. of Defined Benefit member Salaries; plus
- Additional contribution of \$400,000 p.a. for the year with the aim of moving the Plan towards a Vested Benefits Index of 115%.
- Additional contribution of \$450,000 p.a. to fund the cost of expenses and insurance premiums.

### Changes to benefits since the last valuation of the Plan

There have been no changes to the benefits of the Plan members consider in this valuation over the three years ending 30 June 2018.

### Sources of Information

We have relied on the administrative records at 30 June 2018, as currently stored on the Australian Administration Services Pty Limited ("AAS") administration system.

We have relied on the audited accounts from AAS for the three years ending 30 June 2018 together with information set out in the Plan's annual report in each of these years. We have also relied on investment information from the Plan's investment managers.

Where possible, the information provided has been checked for reasonableness and is considered suitable for the purposes of this investigation.

## Data

The membership details are summarised in Appendix B. In brief there were 142 members in total as at 30 June 2018 as follows:

- 40 active defined benefit members with total salaries of \$5.211 million.
- 73 lifetime pensioners with annual pension payments of \$1,192,818 p.a.
- 29 accumulation benefit members, of which 24 are ex-employees and 5 are account-based pension members.

A comparison of the Plan's membership between the last valuation date and this valuation date is enclosed as Appendix B to this report.

We have checked a sample of the membership data for internal consistency and are satisfied as to the accuracy of this sample.

The average attained age of Defined Benefit Members has increased from 53.4 years to 55.5 years. The average completed membership of Active Defined Benefit Members has increased from 15.6 years to 16.6 years.

The salary weighted average annual rate of Salary increase over the review period of Active Defined Benefit Members was approximately 2.7% p.a.

## Section 3: Assets and Investment Strategy

### Accounts

We have been supplied with audited accounts covering the twelve month periods to 30 June 2016, 30 June 2017 and 30 June 2018.

We have reconciled the statistical data on exits provided for the purposes of this valuation with the amounts appearing in the accounts for benefit payment purposes and have checked all the larger benefit payments to ensure that these were being calculated in accordance with the provisions of the Trust Deed.

The Plan's accounts show that LDS Australia has been contributing in accordance with the recommendations of the last valuation report.

### Net Market Value

The breakdown of the market value of the Plan's total assets held by investment managers at 30 June 2018 is summarised below.

Market Value of Assets at 30 June 2018	Market Value \$
<b>Unit Trusts</b>	
UBS Diversified Fixed Income Fund	3,176,075
Schroder Real Return CPI Plus 5% Fund	4,106,215
Franklin Templeton Multisector Bond Fund	1,781,108
Vanguard Australian Shares Index Fund	10,991,086
Vanguard Australian Property Securities Index Fund	426,606
Vanguard International Property Securities Index Fund	250,267
Vanguard International Property Securities Index Fund Hedged	965,496
Vanguard International Shares Index Fund	4,870,664
Vanguard International Shares Index Fund Hedged	2,341,647
Vanguard Cash Reserve Fund	101,577
Schroder Absolute Return Income Fund	3,244,130
<b>Total</b>	<b>32,254,871</b>
Current Assets	1,144,940
Current Liabilities	(147,062)
<b>Net Assets before deducting the ORFR</b>	<b>33,252,749</b>
Operational Risk Financial Reserve (ORFR)	(94,271)
<b>Market Value of Total Net Assets</b>	<b>33,158,478</b>
VSP Accounts for DB Members	1,876,097
Account Based Pensioners	850,139
Retained Benefit and Spouse Accounts	1,653,391
<b>Market Value of Total Net Defined Benefit Assets</b>	<b>28,778,851</b>

The market value of the Plan's total assets are based on redemption unit prices. The Market Value of the Net Assets are the net assets available to meet the Plan's liabilities including Defined Contribution liabilities as used in determining the contribution recommendations and Funding Status Measures at the valuation date.

The Trustee maintains an operational risk financial reserve as shown in the table above.

## Accumulation Benefits – Member Investment Choice

Members currently have the following four investment options in which to invest their voluntary savings program (VSP) accumulation accounts:

- Cash
- Enhanced Yield
- Market Linked
- High Growth

Under investment choice, the returns credited to each option directly reflect the investment earnings of the option. No reserves are maintained to smooth return credited to Members. I consider this crediting rate policy to be suitable.

## Nature of Defined Benefit Liabilities

The level of the Defined Benefit liabilities does not bear the same direct relationship with the assets as exists with accumulation liabilities (where the assets and liabilities are generally matched).

The Defined Benefit liabilities reflect such things as salary growth, pension increases and mortality experience, whereas the supporting assets depend on a range of factors including:

- i. the level of Employer contributions, and
- ii. the level of investment returns.

So, it is the Employer which bears the investment risk as the level of contributions is dependent on the level of investment returns achieved.

An investment strategy for the Defined Benefit Section which is framed to take a long-term view will often adopt relatively high levels of equity investment in order:

- i. to secure attractive long term investment returns, and
- ii. to provide an opportunity for capital appreciation and dividend growth, which gives some protection against inflation (as benefits are linked to Salary growth and pension increases are linked to inflation).

The main constraint in this situation is that potential fluctuations in asset values mean that the total asset value could fall below the level of Vested Benefits, placing the Plan in an unsatisfactory financial position.

While the impact of a sudden sharp fall in asset values can be limited by maintaining a buffer of assets over and above the level of vested benefits, the level of the buffer may never be sufficiently high to safeguard against all investment outcomes. However, the buffer should be at a level where the risk of the asset values falling below the level of vested benefits under a particular investment strategy is acceptable to the Trustee and the Employer.

In this regard, a lower buffer may be acceptable where the Employer is willing and able to accept short-term variations in contributions as part of underwriting the defined benefits of the Plan. In this case, short-term variations in Employer contributions may result from:

- i. reducing a buffer that has grown too large, or
- ii. rebuilding a buffer that has fallen or become negative.

An alternative for a plan which does not have a sufficient asset buffer above the level of Vested Benefits is to adopt a more conservative investment strategy. While this may reduce short-term fluctuations in asset values, it is also likely to reduce long-term returns and hence result in increased company contributions in the long-term.

In summary, a balance needs to be achieved between these short-term and long-term considerations in funding the defined benefit liabilities.

## Defined Benefits – Investment Objectives and Guidelines

The Trustee's principal investment objectives are:

- a. Real Return Objective over rolling 7 year periods of:
  - To achieve a rate of return (net of tax and investment expenses) of at least the AusBond Bank Bill Index plus 1.5% p.a.
- b. Downside Risk Objective
  - To limit the probability of a negative return over rolling 12 month periods to 3 to 4 years in 20.
  - To limit the one year in twenty worst case to a negative return of -15%.

We have taken account of the investment objectives of the Plan and the investment guidelines under which the Plan's investment managers operate in setting our actuarial assumptions in Section 4 of this report.

## Investment Strategy

In order to meet the investment objectives set for the Defined Benefits Section, the Trustee has adopted a specific long term benchmark allocation to each asset class.

The table below shows the benchmark asset allocation for the Defined Benefits Section as at 30 June 2018.

Asset Class	Benchmark Asset Allocation as at 1 July 2018
Australian Shares	33%
Overseas Shares	22%
Property	5%
Diversifying Investments	20%
Diversified Fixed Income	10%
Credit Securities	10%
<b>Total</b>	<b>100%</b>

## Suitability of Investment Strategy

The defined benefit categories within the Plan are now all closed to new members. The age profile of these categories will gradually increase. At 30 June 2018 the average age was 55.5 years old, and there has been a consistent trend of around 85% of defined benefit members taking their retirement benefits in the form of a lifetime pension, so the investment timeframe is relatively long-term at present.

The current investment policy is considered suitable for the Plan's liabilities in respect of active defined benefit membership at 30 June 2018, and we consider the investment strategy for pension assets to be also appropriate, provided the employers accept the funding risks associated with the strategy. However, as the pension assets continue to increase as a proportion of defined benefit liabilities, we recommend that the investment strategy for pension assets be reviewed and formally re-confirmed by the Employers.

The funding position at 30 June 2018 may not permit a de-risking of the investments backing the pension liabilities without significant additional employer funding, however a de-risking strategy should be considered by the employer in conjunction with the investment strategy review for pensions.

## Considerations Relating to Lifetime Pensions

The Plan has sufficient liquidity to make pension payments from regular cashflows or the ready sale of the Plan's assets from time to time.

Upon the death of a lifetime pensioner (if no reversionary spouse pension is payable), the liability ceases. Any surplus created (i.e. where the liability held in respect of that pensioner is greater than the pension payments made) improves the Plan's financial position. Similarly any pensioners that live beyond the expected lifetime allowed for in the valuation of the pension liabilities will serve to worsen the Plan's financial position.

Taking into consideration the current levels of surplus in the Plan and the order in which assets are distributed to members in the event of Plan Termination, I consider the assets held by the Plan to be suitable for meeting the future expected benefit payments for the pension members of the Plan. I also consider the assets, including future contributions, to be sufficient to provide for the risk of longevity.

## Section 4: Valuation Method, Plan Experience and Actuarial Assumptions

To carry out an actuarial valuation assumptions are required in three areas:

- the valuation method to be adopted,
- the value of the assets for the purposes of long term assessment, and
- the assumptions for factors which will affect the cost of the benefits to be provided by the Plan in the future.

### Valuation Method

#### *Attained Age method*

The funding method adopted at the previous valuation at 30 June 2015 was the Attained Age method. We have retained that method in this valuation.

The calculation of the Employer contribution by this method consists of three parts.

The **first part** is the “normal cost”. The total normal cost is expressed as a level % of expected future salaries and is equal to the cost based on actuarial assumptions of the benefits accruing to the members in respect of all future membership following the valuation date.

The **second part** is the cost of insurance premiums, administration and taxation expenses and for this Plan, we express this as an annual lump sum cost.

The **third part** is the Employer contribution required to manage the Plan’s financial position around the target funding level or short term financial position requirements such as the Plan’s Shortfall Limit.

### Trustee Funding Policy

LDS Australia and the Trustees have agreed to a Funding Policy which is dated June 2016.

The policy sets a reviewable range for funding level of between 100% and 120% of total Plan Vested Benefits. As advised in the previous report effective 30 June 2015, the target funding level is 115%.

If the market value of the Plan’s assets falls below the minimum target funding level, LDS Australia’s contributions will be determined by the Plan’s Actuary as the rate expected to return the Plan’s assets to within the target range within 3 years, or such higher rate as agreed by LDS Australia. The Plan’s Actuary may also require LDS Australia make additional contributions in respect of any exits from the Plan, aiming to at least maintain the Plan’s financial position.

If the market value of the Plan's assets is greater than the target funding range, LDS Australia may reduce or cease contributions until the Plan's assets are within the target range. The length of contribution holiday or reduction will be advised by the Plan's Actuary.

Our contribution recommendations in this report have been determined on the basis of a target funding level of 115%.

## Actuarial Value of Assets

For the purposes of this valuation, we have valued assets at their market values as included in the financial accounts at 30 June 2018.

## Plan Experience and Valuation Assumptions

It is important when setting the valuation assumptions to examine the experience of the Plan to see whether the previous assumptions have been borne out in practice. A summary of the major items of experience over the last three years is given in the following paragraphs.

## Investment Return

The assumption for investment returns at the last valuation was 6.0% p.a. net of tax and expenses, and 6.5% p.a. gross of tax (net of expenses). The Plan's investment returns over the three years to 30 June 2018 in respect of the Defined Benefit assets have been as follows:

Year ending 30 June	Investment Returns (net of expenses)	
	Net of Tax	Gross of Tax
2016	-0.43%	-1.00%
2017	9.63%	10.38%
2018	8.37%	8.10%
Average over the 3 years	5.76% p.a.	5.71% p.a.

The average investment return was 0.24% p.a. lower than the assumed rate for assets supporting active defined benefit liabilities and 0.79% p.a. lower than the assumed rate for assets supporting pension liabilities. This under performance has had a negative effect on the Plan's financial position.

For this valuation, we have adopted a lower long term future investment return of 5.0% p.a. (net of expenses and taxes) for assets backing active defined benefit liabilities and 5.8% p.a. (net of investment expenses) for assets backing pension liabilities. This assumption is consistent with the Trustees' investment objectives and Willis Towers Watson's view of the current market outlook over the medium term.

The change in investment return assumption for pension assets from 6.5% to 5.8% has a material effect on the value of pensioner liabilities which are estimated to have increased by \$690,000 as a result of the change.

## Salary Inflation

The assumed rate of salary inflation was 3.0% p.a. The salary weighted average rate of growth of Salaries for Defined Benefit members who were present at both the last and current valuation dates was 2.7% p.a. The actual increase in salary growth was approximately 0.3% p.a. lower than the assumed rate. This means that accrued liabilities for active defined benefit members of the Plan have increased slightly less than expected.

In view of the long term nature of this assumption and following discussions with LDS on future expectations of salary growth for the Defined Benefit member group of employees, for this valuation we have reduced the base rate of salary inflation from 3.0% p.a. to 2.5% p.a.

Over the long term, it is the “gap” between the investment return (net of tax) and salary inflation assumption that is important when valuing active members’ liabilities. In this valuation we have reduced the “gap” from 3.0% p.a. used in the previous valuation to 2.5% p.a. Over the review period, the actual “gap” was 3.1% p.a. which has had a slightly positive impact on the Plan’s financial position.

The change in “gap” assumption has increased liabilities for active defined benefit members by an estimated \$421,000.

## Pension Indexation

Pension indexation is applied on a discretionary basis and is not guaranteed. Since 30 September 2005, the pensions in payment have not been indexed. As such, we will continue to maintain the assumption of no annual indexation of pensions. However, it should be noted that any indexation that is applied to pensions in payment will result in an immediate funding requirement which should be reviewed if/when any such indexation is applied.

## Pensioner Mortality

We have retained the assumptions used at the previous valuation. We have adopted pensioner mortality assumptions in line with those published in the Australian Life Tables (ALT) 2010-2012, the most recent available Australian life tables, including 25 year improving mortality factors.

As the proportion of Plan liabilities for pensioners steadily increases, we consider it prudent to regularly review this assumption and (where needed) strengthen the reserves to reflect improving longevity.

## Take-up of Lifetime Pension

In the last valuation, it was assumed that 75% of retirement benefits were taken in the form of lifetime pensions with the remaining amount taken as a lump sum. Since the last valuation, experience has shown that 93% of retirement benefits were taken as pensions. For this valuation, we have increased the take up rate assumption to 85% in line with the Plan’s experience. We will continue to monitor the Plan’s experience.

The change in pension take-up assumption has increased liabilities for active defined benefit members by an estimated \$164,000.

## Rates at which Members Leave Service and Retire

We have retained the assumptions used at the previous valuation. Statistically significant results based on actual experience are not available from a fund of this size.

## Rates at which Members Leave due to Death or Total and Permanent Disablement (TPD)

In view of the small size of the Plan membership, we have retained the long-term assumptions for disablement from the previous valuation. We have also retained the assumed rates of death used at the previous valuation, being consistent with those published in the ALT 2010-2012 which have been used to value the Plan's pension liabilities.

## New Members

All Defined Benefit categories have been closed to new entrants since 31 December 2012. Since then, all new members have joined the Accumulation Section.

## Expenses and Insurance Premiums

In the last valuation, the assumed cost of expenses and insurance premiums, incurred in running the Plan were equal to \$450,000 per annum. The following table outlines the expenses and insurance premiums paid over the 3 years to 30 June 2018:

	2015/2016	2016/2017	2017/2018
Expenses*	393,000	509,000	486,000
Insurance Premiums	70,000	147,000	142,000
<b>Total</b>	<b>463,000</b>	<b>656,000</b>	<b>628,000</b>

\* Net of member fees recouped from Retained Benefit members and Account-Based Pensioners.

Expenses have increased in respect of consulting fees, audit fees, investment fees and substantial increases in insurance premiums, together with reduced member fees recouped from Retained Benefit members.

We have increased our assumed cost of expenses and insurance premiums to \$650,000 p.a. in line with the Plan's experience and expected expenses going forward.

## Superannuation Guarantee increases

The Superannuation Guarantee (SG) rate, being the minimum rate of superannuation employers must provide for its employees is set to increase from 9.5% to 12.0% over the period 1 July 2021 to 1 July 2025. LDS Australia funds this increase in the SG rate by making additional contributions to members' additional accumulation accounts. LDS Australia has incorporated the increases to the SG rate to date into the Plan's benefits by increasing the employer contribution allocated to the Defined Benefit Employer (Statutory) Account in line with the increases, thereby increasing member leaving service benefits as a result.

Consideration will need to be given to how the further increases to minimum benefit obligations from 2021 are to be provided within the Plan design. This valuation has been prepared on the basis that the contribution rate applied to the leaving service benefit is increased in line with the SG rate.

## Summary of Valuation Assumptions

A summary of our valuation assumptions is set out in Appendix C to this report.

## Section 5: Insurance Arrangements

### Adequacy of Insurance

The insurance coverage of the Plan is secured through an insurance policy with Zurich Australia and is considered adequate if the net assets of the Plan are sufficient to cover the Death benefits of the Plan after any insured components have been allowed for.

The current level of insurance is calculated as:

Insured Benefit = Death Benefit – Accrued Retirement Benefit × 95%; where

- Death Benefit = 4 × Salary;
- Accrued Retirement Benefit = Calculated at previous 30 June, as the maximum of:
  - a. Leaving Service Benefit (sum of accounts); and if aged 55 or over at the previous 30 June
  - b. Accrued multiple × Final Average Salary × Discount Factor × Lump Sum Conversion Factor as outlined in the PDS/Member Booklet.

The following table shows the adequacy of the Plan's insurance cover:

	Death Benefits \$m
Lump Sum Death Benefits (A)	20.8
Less Aggregate Group Life Insurance (B)	8.0
Plan's Exposure (A – B)	12.8
Plan's Net Assets for Defined Benefit members excluding lifetime pensions	15.8

The Net Assets (excluding assets backing accumulation assets, lifetime pension and deferred lifetime pension) as at 30 June 2018 of \$15.8 million are sufficient to meet the Plan's Exposure of \$12.8 million. This is primarily due to the Plan's current funding surplus. The current insurance arrangements are considered adequate considering the funding arrangements in place and no changes are recommended.

The Disability Benefit provided to members is fully insured and is considered adequate.

## Section 6: Solvency and Funding Measures

There are several methods used to assess the current financial situation (i.e. funding status measures) of the Plan. These measures are dealt with below.

### Vested Benefits

Pursuant to superannuation law and SPS 160, a fund (or a section of a fund) is in a “satisfactory” financial position if the assets of the fund cover the Vested Benefit entitlements of the members of the fund.

The Vested Benefits represent the benefit entitlements of Members should they voluntarily leave the Plan and the value of the pension benefits for members who have already left service. Where the member is entitled to a defined benefit pension or a deferred benefit or to exercise an option, then the value of that benefit or option has been determined using the assumptions adopted for this valuation. The Vested Benefits Index is a test of the Plan’s solvency if all Members voluntarily resigned (if under 55) or retired (if over 55) on the review date.

The following table shows the progression of the Vested Benefits Index over the review period.

	Last Valuation Defined Benefits Only* (\$'000)	This Valuation Defined Benefits Only* (\$'000)	Last Valuation All Benefits (\$'000)	This Valuation All Benefits (\$'000)
Market Value of Assets	\$25,601	\$28,779	\$33,136	\$33,158
Vested Benefits:				
Active DB Members	\$11,472	\$14,048	\$11,472	\$14,048
Lifetime Pensioners	\$11,814	\$12,995	\$11,814	\$12,995
Deferred Pensioners	\$316	–	\$316	–
VSP for DB Members	–	–	\$1,994	\$1,876
Account-based Pensioners	–	–	\$828	\$850
Retained/Spouse	–	–	\$4,717	\$1,653
	\$23,602	\$27,043	\$31,137	\$31,423
Vested Benefits Index	108.5%	106.4%	106.4%	105.5%

\* The “Defined Benefits Only” figures illustrate the financial position of the Plan in respect of the Defined Benefit liabilities, excluding additional accumulation accounts for defined benefit members. As a result, an amount in respect of accumulation liabilities (after an allowance for surcharge offset accounts) has been excluded from the Value of Assets and the Vested Benefits respectively.

As at 30 June 2018, the net Market Value of the assets of the Plan exceeded the Vested Benefits and the Plan was in a satisfactory financial position. The ratio of the Plan’s assets supporting defined benefits to the vested defined benefits was 106.4%. At the previous valuation, this ratio was 108.5%. The ratio has deteriorated primarily due to the changes in assumptions since the last valuation, as discussed in Section 4, which have added \$1,275,000 to liabilities. Without these changes in assumptions, the Vested Benefits Index at 1 July 2018 for defined benefits only would have been 111.7%.

The total vested benefits of \$31,422,663 differs from the amount of \$30,748,283 shown in the audited financial accounts. This difference is due to new assumptions for investment returns and pension take up rate adopted for this valuation as outlined in Section 4.

## Actuarial Value of Accrued Benefits

An indication of the funding status of the Plan is given by the ratio of the Plan's net assets to the Actuarial Value of Accrued Benefits (AVAB). This is called the Actuarial Value of Accrued Benefits Index (AVABI).

AVAB represents the value in today's dollars of future benefits based on membership completed to the review date, allowing for future salary increases, investment earnings and expected incidence of payment. "Accrued Benefits" has the meaning given in Regulation 9.27 of the SIS Regulations.

It is important that the Actuarial Value of Accrued Benefits Ratio is not used to compare the level of funding between superannuation funds but is used as a measure to assess the funding status of a superannuation fund from time to time. Different superannuation funds can be expected to have different Actuarial Value of Accrued Benefits Ratios depending on the age and employment history of the members.

A fully secured position is represented by a ratio of 100.0%. At this level, if the Plan were closed to new entrants and no further benefits were allowed to accrue to current members, assets would be sufficient to meet all future benefit payments if the actuarial assumptions are borne out in practice.

The following table shows the progression of the Actuarial Value of Accrued Benefits Index over the review period.

	Last Valuation Defined Benefits Only* (\$'000)	This Valuation Defined Benefits Only* (\$'000)	Last Valuation All Benefits (\$'000)	This Valuation All Benefits (\$'000)
Market Value of Assets	\$25,601	\$28,779	\$33,136	\$33,158
Actuarial Value of Accrued Benefits:				
Active DB Members	\$11,892	\$15,227	\$11,892	\$15,227
Lifetime Pensioners	\$11,814	\$12,995	\$11,814	\$12,995
Deferred Pensioners	\$316	–	\$316	–
VSP for DB Members	–	–	\$1,994	\$1,876
Account-based Pensioners	–	–	\$828	\$850
Retained/Spouse	–	–	\$4,717	\$1,653
	\$24,021	\$28,222	\$31,556	\$32,601
Actuarial Value of Accrued Benefits Index	106.6%	102.0%	105.0%	101.7%

\* The "Defined Benefits Only" figures illustrate the financial position of the Plan in respect of the Defined Benefit liabilities, excluding additional accumulation accounts for defined benefit members. As a result, an amount in respect of accumulation liabilities (after an allowance for surcharge offset accounts) has been excluded from the Value of Assets and the Actuarial Value of Accrued Benefits respectively.

As at 30 June 2018, the net Market Value of the assets of the Plan were adequate to cover the Actuarial Value of Accrued Benefits.

## Minimum Benefits

The company's Superannuation Guarantee (SG) obligation is either fully or partly met for all members by the minimum benefits provided under the Plan. The required Benefit Certificate is dated 21 January 2015.

A Funding and Solvency Certificate dated 7 July 2016 has been issued to the Trustee corresponding to the above mentioned Benefit Certificate (this Certificate will be updated in conjunction with this valuation). The purpose of this certificate is to specify the required company contributions needed to fund the minimum benefits used to offset the SG charge.

The Plan is "solvent" if the net assets of the Plan exceed the Minimum Requisite Benefits (MRB) of all members of service.

The following table shows the progression of the Minimum Benefits Index over the review period.

	Last Valuation Defined Benefits Only* (\$'000)	This Valuation Defined Benefits Only* (\$'000)	Last Valuation All Benefits (\$'000)	This Valuation All Benefits (\$'000)
Market Value of Assets	\$25,601	\$28,779	\$33,136	\$33,158
Minimum Requisite Benefits:				
Active DB Members	\$10,381	\$12,347	\$10,381	\$12,347
Lifetime Pensioners	\$11,814	\$12,995	\$11,814	\$12,995
Deferred Pensioners	\$316	–	\$316	–
VSP for DB Members	–	–	\$1,994	\$1,876
Account-based Pensioners	–	–	\$828	\$850
Retained/Spouse	–	–	\$4,717	\$1,653
	\$22,510	\$25,342	\$30,045	\$29,721
Minimum Requisite Benefits Index	113.7%	113.6%	110.3%	111.6%

\* The "Defined Benefits Only" figures illustrate the financial position of the Plan in respect of the Defined Benefit liabilities, excluding additional accumulation accounts for defined benefit members. As a result, an amount in respect of accumulation liabilities (after an allowance for surcharge offset accounts) has been excluded from the Net Assets and the Minimum Benefits respectively.

As at 30 June 2018, the net assets of the Plan exceeded the Minimum Benefits and the Plan was in a solvent financial position. The ratio of the Plan's net assets supporting defined benefits to the minimum defined benefits was 113.6%.

## Shortfall Limit

As required under SPS 160 the Trustee has set the Shortfall Limit for the Plan as 97%. The 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 to temporary negative market fluctuations in the value of fund assets, the fund can be restored to a satisfactory financial position within one year.”*

Should the financial position of the Plan breach the Shortfall Limit, additional interim Actuarial investigations will be required with rectification plans to be put in place to address the unsatisfactory financial position.

We consider the Shortfall Limit is appropriate given the nature of the defined benefit assets.

## Benefits Payable on Termination

Clause 1.27 of the Trust Deed provides for the Plan to be distributed between members only to the extent that the assets permit. Hence, in the event of termination, there is no liability on LDS Australia for additional amounts above contributions paid or owing up to the date of termination.

On termination of the Plan, Clause 1.27 of the Trust Deed states that, subject to advice from the Plan's Actuary, assets should be applied in the following order:

- Payment or provision for any tax in respect of the Plan;
- Payment to meet all expenses incurred by the Plan including the costs and expenses of terminating the Plan;
- Payment to provide SG benefits to former employees (pensioners in payment and retained benefit members);
- Payment to provide any other benefits to former employees (pensioners in payment and retained benefit members);
- Payment to provide the vested benefit to current employees;
- Payment to provide additional benefits to current employees in respect of the difference between their leaving service benefit and the accrued benefit under the relevant Division of the Trust Deed;
- Payment to distribute any further assets to all members as an additional benefit.

## Adequacy of Pension Assets

In accordance with 23(h) of SPS160, and Professional Standard 410, dated December 2017, issued by the Institute of Actuaries of Australia, the Actuary is required to make an opinion on the probability of the Plan being able to meet the pension payments in respect of members currently in receipt of pensions. This affects the treatment of those pensions under the Social Security means tests.

Further, we have carried out stochastic projections of the Plan's assets and pension payments with the results indicating a high probability of at least 70% that the Plan will be able to meet all expected future pension payments. I therefore believe there is a "high degree" of probability that the Plan will be able to pay the pensions as required under the Plan's governing rules.

This view has been formulated after consideration of the Institute of Actuaries PS 410 Statements of Opinion Relating to Defined Benefit Pensions Explanatory Memorandum.

The Plan has approval from APRA to provide this statement of opinion on a triennial basis, instead of the usual annual basis.

## Market Valuation of Pensions

Approximately 76% of the Plan's Defined Benefit Vested Benefits are assumed to be in the form of lifetime pensions. The actuarial valuation for these liabilities has been based on the Plan's expected return and future mortality rates and improvements. While we have not conducted an in depth exercise to find the exact relative market value of these liabilities we have estimated that the market value of these pensions to be around 15% to 25% higher than the liability held under the Plan's valuation basis. The impact of valuing pensions at market rates on the Plan's funding indices for defined benefits only would see the Vested Benefits Index fall to approximately 90% to 96% at the valuation date and the Actuarial Value of Accrued Benefits Index fall to approximately 86% to 92% at the valuation date.

## Future cost of administering pension benefits

We have considered the impact of the accrual of the cost of future administration of pension payments on the funding measures above.

Based on the recent experience for Plan expenses outlined in Section 4 we have broadly identified the proportion of expenses attributable to the life time pensioners based on the ratio of lifetime pension to total defined benefit membership. On this basis our estimates of the ongoing additional costs related to the actuarial and other management of the pension liabilities, the total expenses related to the ongoing management of pensions could be 2.5% of pension assets per annum.

The impact of valuing pensions using a discount rate of 3.3% (5.8% less 2.5% for expenses) on the Plan's funding indices for defined benefits only would see the Vested Benefits Index and the Actuarial Value of Accrued Benefits Index for defined benefits only fall to approximately 89% and 82% respectively at the valuation date.

## Experience since the Investigation Date

Since the investigation date, investment return experience to 31 October 2018 has been -1.33% (net of investment expenses and net of tax) and -1.28% (net of investment expenses and gross of tax). This will lead to a deteriorating financial position over this period which we have allowed for in the projection of the financial position of the Plan in Section 7. The position should continue to be monitored quarterly but the Trustees.

## Summary

The levels of the funding measures have decreased as a result of the change in assumptions adopted in this valuation.

## Section 7: Valuation Contribution Results

It should be emphasised that the funding indices shown in Section 6 relate to the Plan's position at the review date. A projection of the Plan is required to assess the adequacy of Employer contribution rates to provide defined benefits in the future.

Such a projection has been carried out using the funding method and assumptions discussed in Section 4 and set out in Appendix C. The results of the valuation are summarised in this Section.

### Long Term Defined Benefit Contribution Rate

The total value of accrued defined benefits of \$28.2 million represent the present value of all expected future benefits in respect of defined benefit membership accrued up to the valuation date. We have similarly calculated the present value of all expected future Defined Benefits in respect of expected membership after the valuation date ("future service defined benefits").

The amount of long term Company contributions needed is calculated as the present value of Future Service Defined Benefits less the present value of expected future member contributions.

	\$000
Future Service Defined Benefit Liabilities	\$4,782
<i>Less</i> Value of future member contributions	\$1,287
Defined Benefit Liability to be funded from future Employer contributions	\$3,495 (A)
Value of total future salaries	\$28,859 (B)
Future Employer contribution rate required (A) ÷ (B)	12.1%
<i>Plus</i> Allowance for 15% contributions tax	2.1%
<b>Total Gross Employer Contribution Rate required to fund future accrual of benefits (Normal Cost)</b>	<b>14.2% of Total Plan Salaries</b>
<b>Additional Employer Contribution to cover cost of expenses and insurance</b>	<b>\$650,000 p.a.</b>

Hence, the long term "normal cost" contribution rate required to fund future benefits for Defined Benefit Members is 14.2% of Total Plan Salaries.

The main reasons for the increase in contribution rate from the 12.3% recommended in the previous valuation include:

- Tightening of the financial assumptions adopted in this valuation, resulting in an increase in the long term normal cost of 1.0%
- Increase in pension take up rate assumption, resulting in an increase in the long term normal cost of 0.4%
- The remaining difference of 0.5% is a result of the changing demographics of the defined benefit cohort over the valuation period.

## Additional Contributions to meet Target Funding Level

The surplus at 30 June 2018 relative to vested benefits was \$1.7 million (\$0.6 million relative to Actuarial Value of Accrued Benefits). In view of the Plan's financial position and the target funding level of 115%, we have projected the Plan's estimated future VBI position in the table under "Projection of Results" below. We recommend that the employer make additional contributions of \$750,000 per annum from 1 July 2019 onwards with the aim of building up Plan reserves to reach the target funding level of 115% by 30 June 2025.

## Recommended Employer Contribution Rate

In the absence of any special circumstances, we recommend that LDS Australia, and other participating employers, make the following contributions to the Plan:

### For the period 30 June 2018 to 30 June 2019

- A minimum of 12.3% p.a. of Defined Benefit member Salaries; plus
- Additional contribution of \$400,000 for the year.
- Additional contribution of \$450,000 p.a. to fund the cost of expenses and insurance premiums.

### For the period 30 June 2019 to 30 June 2022

- A minimum of 14.2% p.a. of Defined Benefit member Salaries; plus
- Additional contribution of \$750,000 p.a. with the aim of moving the Plan towards a Vested Benefits Index of 115%.
- Additional contribution of \$650,000 p.a. to fund the cost of expenses and insurance premiums.

## Projection of Results

For Defined Benefit Section members, we have tested the impact of the adoption of the recommended Employer contribution rates above, by projecting the cash flows of the Plan and the build-up of the Plan's assets over the next five years, and comparing the Plan's assets to the projected levels of the Vested Benefits.

The projection uses the actual Plan return of -1.33% (-1.28% for assets backing pensions) for the period from 1 July 2018 to 31 October 2018 and assumes returns from 1 November 2018 onwards as set out in Appendix C.

Projection Date	DB Only Assets \$'000s	DB Only Vested Benefits \$'000s	VBI %
30 June 2018	28,779	27,043	106.4%
30 June 2019	28,772	28,618	100.5%
30 June 2020	29,492	28,051	105.1%
30 June 2021	30,485	28,040	108.7%
30 June 2022	31,443	30,128	104.4%
30 June 2023	32,247	29,211	110.4%
30 June 2024	33,074	30,372	108.9%
30 June 2025	33,216	29,026	114.4%

The projection shows an initial decrease in the Vested Benefits Index as a result of the lower than expected returns from 1 July 2018 to 31 October 2018 as well as a number of members reaching age 55 and becoming entitled to their higher value retirement benefit. This is followed by a somewhat volatile increase in the Vested Benefits Index to approximately 114% at 1 July 2025. The volatility of the Vested Benefits Index is largely influenced by the additional cost associated with members reaching retirement age in the years ending 30 June 2019, 30 June 2022 and 30 January 2024 after which, contribution rates are expected to be able to be reduced and the volatility of the ongoing cost of benefits is expected to reduce.

If the recommended Employer contribution rates shown in this Section are paid, then I expect the Vested Benefits Index (VBI) to remain above 100% over the 3 years to 30 June 2021, assuming the valuation assumptions are borne out in practice.

## Future Review

The financial status of the Plan is sensitive to actual financial experience (principally, investment returns, salary increases and pension take up rates) and membership movements. We therefore recommend that quarterly checks on the Vested Benefits Index continue to be undertaken, and also at any time if the Defined Benefit membership reduces significantly, in order to confirm that the Plan maintains coverage of vested benefits.

The next actuarial valuation is due at 30 June 2021.

## Section 8: Sensitivity Analysis and Material Risks

### Sensitivity Analysis

#### Investment Return

For the purpose of this investigation the investment return assumption is 5.0% (net of tax) and 5.8% (gross of tax). Other assumptions could be used and the table below shows the impact of varying the investment return assumptions on the Plan's financial position and long term contribution rate. No changes have been made to the assumptions adopted for this valuation in the scenarios below.

	This Valuation Basis	Scenario 1	Scenario 2
Investment return (net of tax)	5.0% p.a.	6.5% p.a.	3.5% p.a.
Investment return (gross of tax)	5.8% p.a.	7.3% p.a.	4.3% p.a.
Actuarial Value of Accrued Benefits Index for Defined Benefits only	102.0%	114.4%	89.4%
Long Term Employer Contribution Rate (gross of tax)*	14.2%	12.0%	17.7%

\* Excluding allowance for the cost of expenses and insurance.

It should be noted that the variations selected in the sensitivity analysis above do not indicate upper or lower bounds of all possible outcomes. Further analysis can be carried out if required.

#### Pension take up rate

For the purpose of this investigation the assumed pension take up rate assumption is 85%. Other assumptions could be used and the table below shows the impact of varying the pension take up rate assumption on the Plan's financial position and long term contribution rate. No other changes have been made to the assumptions adopted for this valuation in the scenarios below.

	This Valuation Basis	Scenario 1	Scenario 2
Lifetime pension take up rate	85%	50%	100%
Actuarial Value of Accrued Benefits Index for Defined Benefits only	102.0%	105.9%	100.4%
Long Term Employer Contribution Rate (gross of tax)*	14.2%	12.8%	14.9%

\* Excluding allowance for the cost of expenses and insurance.

It should be noted that the variations selected in the sensitivity analysis above do not indicate upper or lower bounds of all possible outcomes. Further analysis can be carried out if required.

## Pensioner Mortality

For the purpose of this investigation the assumed pensioner mortality rates are in line with ALT 10-12 including 25 year mortality improvement factors. Other assumptions could be used and the table below shows the impact of varying the pensioner mortality rate assumptions on the Plan's financial position and long term contribution rate. No other changes have been made to the assumptions adopted for this valuation in the scenarios below.

	This Valuation Basis	Scenario 1	Scenario 2
Mortality Assumption	ALT10-12	10% heavier mortality	10% lighter mortality
Actuarial Value of Accrued Benefits Index for Defined Benefits only	102.0%	103.5%	100.3%
Long Term Employer Contribution Rate (gross of tax)*	14.2%	14.1%	14.5%

\* Excluding allowance for the cost of expenses and insurance.

It should be noted that the variations selected in the sensitivity analysis above do not indicate upper or lower bounds of all possible outcomes. Further analysis can be carried out if required.

## Material Risks

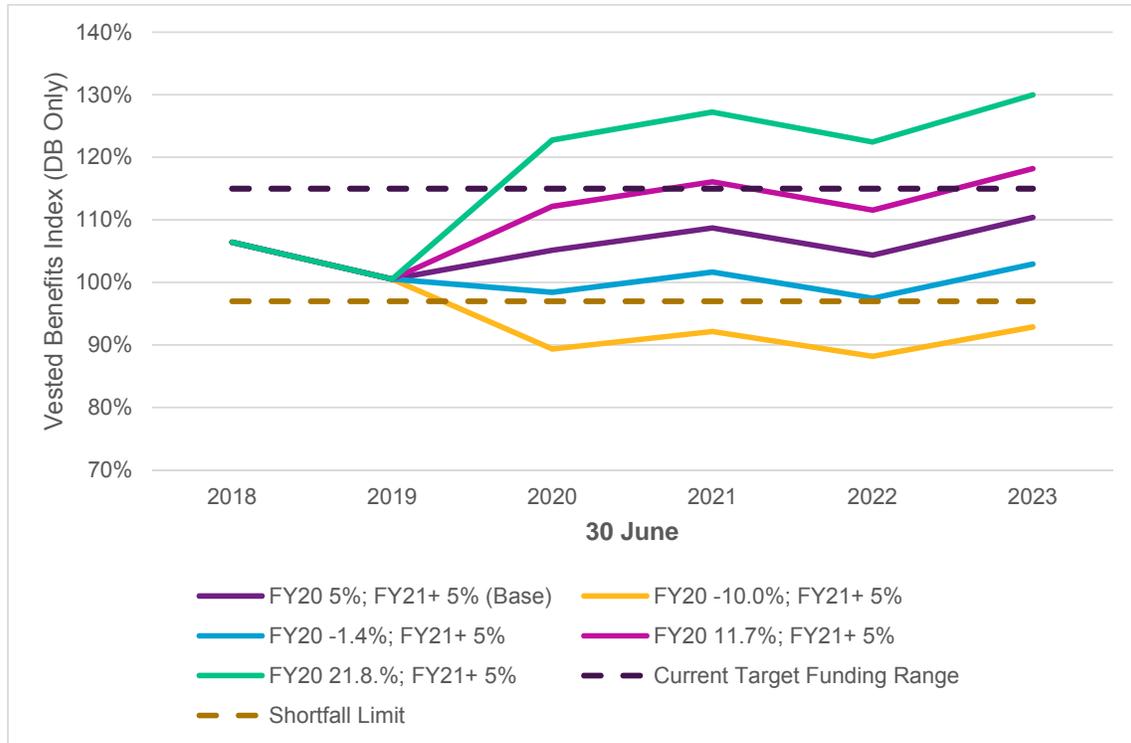
The following charts highlight the sensitivity of two of the Plan's major experience items of the Plan's financial position over the next 5 years as measured by the Vested Benefits Index. The scenarios below labelled "base" reflect the assumptions used in this valuation.

### Investment Returns

For this valuation, I have adopted an investment return assumption of 5.0% p.a. (net of tax) and 5.8% (gross of tax). However, if actual investment returns are less than this, with all other actuarial assumptions borne out, then the funding position (Vested Benefits Index) will worsen and increased company contributions may be required.

The following chart highlights the sensitivity of the Plan's financial position to changes in the actual investment return experience over the 5 year period ending 1 July 2023.

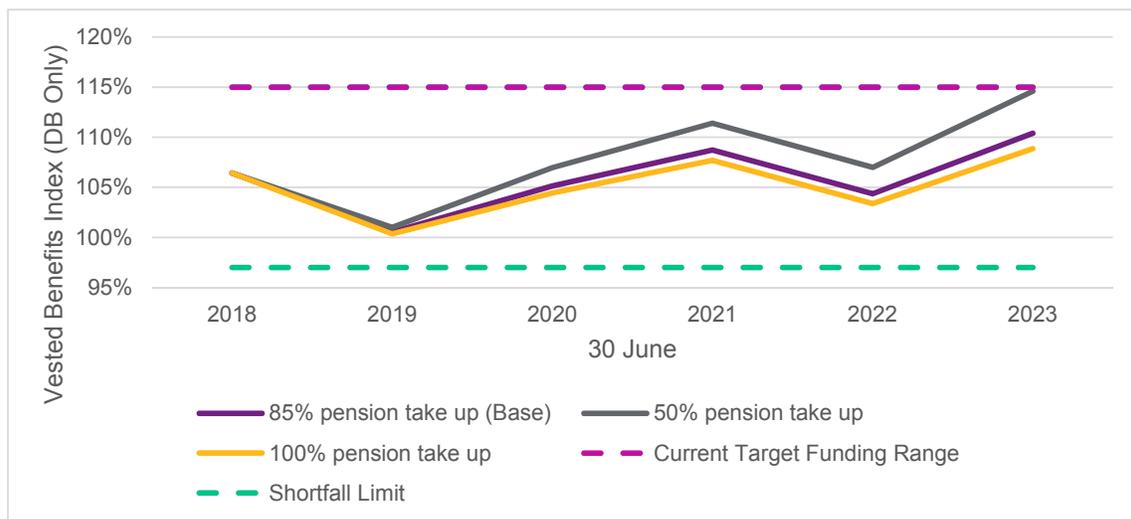
Note that the return applied in year one represents the Plan's actual investment return of -1.33% (-1.28% for assets backing pensions) for the period from 1 July 2018 to 31 October 2018 followed by the expected return of 5.0% p.a. (5.8% for pension assets) from 1 November 2018 to 30 June 2019. Thereafter, the Plan's sensitivity to future investment experience is tested under various scenarios. The scenarios illustrate the effect of various outcomes in FY20 only. All scenarios assume 5.0% p.a. net of tax and 5.8% p.a. gross of tax return in FY21, FY22 and FY23.



**Pension Take Up Rate**

At this valuation I have adopted a pension take up rate of 85%. However, if actual rates of take up of the pension recommended are higher than 85%, with all other actuarial assumptions borne out, then the funding position (Vested Benefits Index) will worsen and increased company contributions may be required.

The following chart highlights the sensitivity of the Plan’s financial position to changes in the actual pension take up rate over the 5 year period ending 1 July 2023.



## Salary Growth

For this valuation I have adopted a salary inflation assumption of 2.5% p.a. However if actual salary increases are greater than this, with all other actuarial assumptions borne out, then the funding position (Vested Benefits Index) will worsen and increased Company contributions may be required. Further analysis can be carried out if required.

## Pensioner mortality

We have made allowance for both socio economic factors and improvements in pensioner mortality in the decrement basis used to value pension benefits. If pensioners experience improvements in mortality at greater rates than allowed, or experience lighter mortality than anticipated in the socio economic factors, then the cost of the pensions will increase, and the financial position of the Plan will be worse than anticipated. The reverse is also true, i.e. if mortality improvement proves to be less than our allowance, or socio economic factors not as light, the cost of the pensions will decrease. Further analysis can be carried out if required.

## Change to investment strategy

Any change to the investment strategy that impacts future expected return on assets supporting the defined benefit liabilities will potentially have a material impact on the financial position of the Plan. If the Trustee is considering changing the investment strategy, we recommend that we be asked to assess the potential impact on the financial position of the Plan and future Company contribution requirements.

## Next Valuation

The next valuation should be held no later than 30 June 2021. Vested Benefits coverage should continue to be monitored quarterly and more frequently if warranted.



**Phil Patterson**  
Fellow of The Institute of Actuaries of Australia

21 December 2018

D: JD | TR: NW | CR, ER: PP

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# Appendix A: Summary of Benefits

## SUMMARY OF BENEFITS AS AT 30 JUNE 2018

### Eligibility

All Permanent Employees (those who work 30 hours or more a week) who join Church employment are eligible to become Plan members. Defined benefit membership was closed on 31 December 2012.

### Definitions

#### *Salary*

The basic annual rate of remuneration including such things as allowances, commissions, bonuses, overtime, etc.

#### *Final Average Salary*

The highest average salary over any three consecutive financial years in the last 10 years before retirement.

#### *Member Basic Account*

The accumulated value of the 4% or 5% standard member contributions, less an allowance for tax (if any).

#### *Voluntary Savings Programme (VSP) Account*

The accumulated value of any rollovers and voluntary contributions, less any allowance for tax (if any). The Voluntary Savings Account is payable in addition to all other benefits.

#### *Statutory Account*

The accumulated value of the minimum Superannuation Guarantee (SG) contributions, less allowance for tax.

#### *Normal Retirement Age*

The Normal Retirement Age is age 65 for all members.

### *Surcharge Account*

Means the accumulated value of any amounts held in respect of the Member under the Surcharge Act. The Surcharge Account is deducted from all benefits.

### **Member Contributions**

Defined Benefit Members are required to contribute either 4% or 5% of Salary to the Plan. They may also make voluntary contributions.

### **Employer Contributions**

LDS Australia contributes the balance of the cost of the benefits.

### **Normal Retirement Benefit**

The benefit is a pension equal to:

- 1.4% of Final Average Salary for each year of Defined Benefit membership before 1 January 2001; plus
- 1.5% of Final Average Salary for each year of Defined Benefit membership from 1 January 2001 where a 4% member contribution was made; plus
- 1.7% of Final Average Salary for each year of Defined Benefit membership from 1 July 2001 where a 5% member contribution was made.

The pension is guaranteed for 10 years. A number of alternative forms of pension payment are also available.

For members who have completed 5 years' service, the pension is subject to a minimum of \$2,400 per annum.

A member may elect to take up to 50% of their pension entitlement in lump sum form.

### **Early Retirement Benefit**

Early retirement may take place within 5 years of Normal Retirement Age provided the member has completed 5 years Defined Benefit membership. Early retirement may take place within 10 years of Normal Retirement Age with LDS Australia's consent, provided the member has completed 5 years of Category A membership.

The benefit is a pension equal to:

- 1.4% of Final Average Salary for each year of Defined Benefit membership before 1 January 2001; plus
- 1.5% of Final Average Salary for each year of Defined Benefit membership from 1 January 2001 where a 4% member contribution was made; plus
- 1.7% of Final Average Salary for each year of Defined Benefit membership from 1 July 2001 where a 5% member contribution was made.

This amount is then reduced by 0.25% for each complete month by which retirement precedes age 65.

### **Late Retirement Benefit**

The benefit is a pension equal to the benefit at normal retirement increased by a factor as decided by the Trustees (currently 1% for each month the member remains in service past normal retirement).

In addition to this late retirement pension adjustment, members over age 65 have SG contributions credited to an additional accumulation account that is paid in addition to the defined benefit. From age 65 onwards, compulsory 4% or 5% member contributions are no longer required.

### **Death in Service**

The benefit is a lump sum of 4 times Salary at the date of death.

### **Total Disablement Benefit**

The benefit is a replacement income equal to two-thirds of the member's pre-disability Salary payable until the member:

- a reaches Normal Retirement Age;
- b dies;
- c recovers and returns to work; or
- d is no longer considered to be totally disabled.

### **Resignation Benefit**

The benefit is a lump sum equal to Statutory Account + Member Account.

## Appendix B: Details of Membership

### Membership as at 30 June 2018

Category	Number of Members	Total Salaries/ Pensions \$	Average Salaries/ Pensions \$	Average Age	Average Completed Membership
Active DB Employees	40	5,211,238	130,281	55.5	16.6
Retained	24	n/a	n/a	57.9	n/a
Lifetime & Deferred Pensioners	73	1,192,818	16,340	76.0	n/a
Account-based Pensioners	5	n/a	n/a	70.2	n/a

### Salary Increases

The salary weighted average annual rate of Salary increase over the review period of Defined Benefit Members was approximately 2.7% p.a.

### Approaching Retirements

In the next three years, 5 members are expected to reach their Normal Retirement Date.

As at 1 July 2018, there are 2 defined benefit members who have passed their Normal Retirement Date.

### Comparison of Membership as at 30 June 2015 to 30 June 2018

Category	Membership at 30 June 2015	Membership at 30 June 2018
A-4%	22	18
A-5%	24	20
A (Late Retirees)	2	2
Retained Benefit	119	24
Lifetime Pensioners	76	73
Deferred Pensioners	2	0
Account-based Pensioners	5	5
<b>Total</b>	<b>250</b>	<b>142</b>

## Appendix C: Valuation Method and Assumptions

### Valuation Method

Attained Age

### Asset Value

Market value taken from audited accounts at the valuation date.

### Investment returns

5.0% p.a. compound (net of investment expenses and net of tax).

5.8% p.a. compound (net of investment expenses and gross of tax).

### Inflationary salary increase

2.5% p.a. compound.

### Rates of leaving service and retirement

Examples of rates at which active employees leave the Plan per year per 10,000 members:

Age Next Birthday	Retirement	Leaving Service
40	Nil	660
45	Nil	440
50	Nil	220
55	1,000	Nil
60	1,000	Nil
65	10,000	Nil

## Rates of Mortality

Examples of mortality rates for both employed and pension members at per year per 10,000.

Age	Male	Female
40	13	8
45	19	12
50	29	18
55	44	26
60	66	40
65	115	62
70	167	103
75	289	181
80	519	332
85	934	664
90	1,612	1,281
95	2,478	2,188
100	3,125	3,033

These rates reflect the mortality rates published in the ALT 2010-2012. The rates are then assumed to reduce each year beyond 2011 in line with the published 25 year improvement factors in the ALT 2010-2012 as summarised below.

Examples of annual % improvements (reductions) in mortality rates from 2011 onwards for both employed and pension members.

Age	Male	Female
40	1.2%	1.2%
45	1.7%	1.6%
50	2.3%	2.0%
55	2.7%	2.3%
60	3.0%	2.5%
65	3.2%	2.6%
70	3.1%	2.5%
75	2.9%	2.4%
80	2.3%	2.1%
85	1.7%	1.5%
90	0.9%	0.8%
95	Nil	0.2%
100	Nil	Nil

## Rates of Disability

None. Allowed for through separate insurance.

### **Rates of retrenchment**

A retrenchment rate of nil has been assumed.

### **Pension indexation**

Nil.

### **Future expense allowance**

Investment expenses are allowed for in the investment returns shown above which are assumed to be net of investment expenses.

The future cost of Plan expenses (excluding investment expenses) and insurance premiums has been assumed to be approximately \$650,000 per annum.

### **New entrants**

No new entrants have been allowed for.

### **Taxes**

Tax on investment income is allowed for in the investment returns shown above.

Tax on contributions has been allowed for as 15% of employer contributions reduced by allowable deductions (administration and insurance costs). No allowance has been made for GST or Reduced Input Tax Credits.

### **Surcharge tax**

No allowance has been made for the Surcharge Tax as the Trustees offset any tax payable by the Plan against the benefits of the relevant Members, if the Member does not reimburse the Plan for the surcharge payable.

### **Composition of membership**

It has been assumed that Members remain in their current Category.

## Pension Take-up Rate

In valuing benefits for active Defined Benefit members, it is assumed that 85% of all retirement benefits are taken as pensions.

Benefits taken in the form of pensions are valued using the Lifetime Pension Benefit (10 year guarantee) commutation factors shown in the table below while benefits taken as lump sums are valued using the lump sum conversion factors in the table below.

## Conversion of Pensions to Lump Sum

Standard commutation factors outlined in the Plan's member booklet are used to convert pensions on retirement to the lump sum benefit should the member choose to take their retirement benefit in this form. Sample factors are as follows:

Age	Conversion Factor per \$ p.a. of Pension
55	11.863
56	11.675
57	11.486
58	11.299
59	11.111
60	10.923
61	10.735
62	10.548
63	10.363
64	10.180
65	10.000

## Appendix D: Statements required under Regulation 23 of SPS 160

The statements required under paragraphs 23(a) to (h) of SPS 160 for regular investigations are set out below. Note, these are provided in relation to the Plan's defined benefit liabilities only.

### (a) Plan Assets

The net market value of assets for the Deseret Benefit Plan for Australia ("the Plan") attributable to the defined benefit liabilities at 30 June 2018 was \$28,778,851. This amount is the amount disclosed in the audited accounts and excludes assets attributable to accumulation members or the accumulation balances of defined benefit members as well as any Operational Risk Financial Requirement.

This value of assets at 30 June 2018 was used to determine the recommended Company contribution rates and assess the funding status measures and is also referred to as the "actuarial value" of the assets.

### (b) Projection of Vested Benefits

The projected likely future financial position of the defined benefit category of the Plan during the three years following the valuation date and based on my best estimate assumptions is as follows:

Projection Date	DB Only Assets \$'000s	DB Only Vested Benefits \$'000s	VBI %
30 June 2018	28,779	27,043	106.4%
30 June 2019	28,772	28,618	100.5%
30 June 2020	29,492	28,051	105.1%
30 June 2021	30,485	28,040	108.7%

### (c) Accrued Benefits

In my opinion, the value of the assets of the defined benefit members of the Plan (excluding any amount held to meet the ORFR) at 30 June 2018 was adequate to meet the liabilities in respect of the accrued benefits of defined benefit members of the Plan (measured as the value of members' accrued entitlements using the valuation assumptions). We consider that the assumptions and valuation methods set out in this report are appropriate for determining the accrued liability.

### (d) Vested Benefits

At 30 June 2018 the Plan was in a satisfactory financial position, as defined in SPS 160. In my opinion the Plan does not need to be treated as being in an unsatisfactory financial position. The shortfall limit does not need to be reviewed.

**(e) Minimum Benefits**

At 30 June 2018 the value of the minimum benefits of the defined benefit members of the Plan was \$25,341,622, which was less than the defined benefit assets at that date. Minimum benefits are as defined in Regulation 5.04 of the Superannuation Industry (Supervision) Regulations.

The coverage of the MRBs for all defined benefit members of the Plan as at 30 June 2018 was 113.6%, and for all Plan members (including accumulation members) was 111.6%.

**(f) Funding and Solvency Certificates**

Funding and Solvency Certificates for the Plan covering the period from 30 June 2015 to 30 June 2018 have been obtained. The Plan was solvent, as defined in the Superannuation Industry (Supervision) Regulations at 30 June 2018. In my opinion, the solvency of the Plan will be able to be certified in any other Funding and Solvency Certificate required under the Regulations during the three year period to 30 June 2021.

**(g) Recommended Company Contributions**

In the absence of any special circumstances, we recommend that LDS Australia, and other participating employers, make the following contributions to the Plan:

**For the period 30 June 2018 to 30 June 2019**

- A minimum of 12.3% p.a. of Defined Benefit member Salaries; plus
- Additional contribution of \$400,000 p.a. for the year.
- Additional contribution of \$450,000 p.a. to fund the cost of expenses and insurance premiums.

**For the period 30 June 2019 to 30 June 2022**

- A minimum of 14.2% p.a. of Defined Benefit member Salaries; plus
- Additional contribution of \$750,000 p.a. with the aim of moving the Plan towards a Vested Benefits Index of 115%.
- Additional contribution of \$650,000 p.a. to fund the cost of expenses and insurance premiums.

**(h) Defined Benefit Pensioners**

In my opinion, as at 30 June 2018 there is a high degree of probability, at least 70%, that the Plan will be able to pay pensions as required in the governing rules.



**Phil Patterson**  
Fellow of The Institute of Actuaries of Australia

21 December 2018

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