MERCER

Report to the Trustee on the Actuarial Investigation as at 30 June 2020

HEALTH SUPER DB FUND

(a sub-fund of the First State Superannuation Scheme)

17 August 2020

welcome to brighter

Contents

Context

This report is only in relation to the Health Super DB Fund, a sub-fund of the First State Superannuation Scheme (expected to rebrand to Aware Super in September 2020). The Health Super DB Fund covers defined benefit members in the Health Super Defined Benefit Scheme and the Health Super Lifetime Pensions Scheme. Any reference to "the Fund" in this report refers only to the Health Super DB Fund. I have not considered the accumulation sections of the First State Superannuation Scheme.

Any reference to "Institutions" includes all institutions whose members participate in the Fund.

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Key Results and Recommendations

1.1 Purpose

The Health Super DB Fund (the Fund) covers defined benefit members in the Health Super Defined Benefit Scheme and the Health Super Lifetime Pensions Scheme. This report sets out the results of the actuarial investigation as at 30 June 2020 of the Fund, a sub-fund of the First State Superannuation Scheme. This investigation does not consider the accumulation sections of the First State Superannuation Scheme.

I have prepared this report exclusively for the Fund's trustee, FSS Trustee Corporation (the Trustee), for the following purposes:

- To meet legislative requirements under the Superannuation Industry (Supervision) Act and associated Regulations (SIS legislation);
- Review Fund experience for the period since the previous actuarial investigation as at 30 June 2019; and
- Recommend the rates at which Institutions should contribute to allow the Fund to meet its benefit obligations in an orderly manner, and to reach and maintain an appropriate level of security for members' accrued benefit entitlements.

Angela Hartl, FIAA, completed the previous actuarial investigation of the Fund as at 30 June 2019 and the results of the investigation were set out in her report dated 15 August 2019.

1.2 Current financial position

A summary of the Fund's financial position as at 30 June 2020 is set out below (2019 shown alongside for information):

Health Super DB Fund	As at 30 June 2020		As at 30 June 2019	
	$M	Asset Coverage	$M	Asset Coverage
Assets	1,118.3*		1,174.4	
Vested Benefits	1,075.2	104.0%	1,071.4	109.6%
Actuarial Value of Accrued Benefits	1,076.0	103.9%	1,065.7	110.2%

* See Section 2.3 for calculation of the net value of assets for actuarial investigation purposes.

This confirms the Fund is in a "satisfactory financial position" as defined in the SIS legislation as at 30 June 2020 as the value of Fund assets exceeds total Vested Benefits. The Fund's asset coverage of Vested Benefits is also within the target coverage level of between 100% and 110% of Vested Benefits.

1.3 Financing objective adopted for this investigation

The financing objective adopted for the previous investigation of the Fund as at 30 June 2019 was to ensure assets were at least equal to 100% of the Vested Benefits of the Fund, but to target and then maintain assets at least equal to 110% of the Vested Benefits of the Fund.

Most of the Fund's liabilities (defined benefit and lifetime pension) are not linked to the returns on the underlying assets. A margin of assets in excess of the Fund's Vested Benefits is therefore desirable to provide some security against adverse experience such as poor investment returns.

Given the number of Institutions contributing to the Fund, it is desirable if there is stability in the Institutions' contribution rates. Accordingly, I have formalised adoption of a funding target range for this investigation. I consider that targeting a funding range of between 100% and 110% coverage of Vested Benefits strikes a suitable balance between the Trustee's desire to provide security to members and stable contribution rates for the Institutions, whilst avoiding an unnecessary build-up of surplus.

This target funding range recognises:

- The current funding position of the Fund which falls in the middle of this range;
- The Institutions' contribution rates which are slightly higher than the long-term cost of providing benefits for active members; and
- That due to the maturity of the active membership and the significant number of pensioners and deferred pensioners, any shortfalls are difficult to fund by increasing contributions, other than by large lump sums.

Based on the assumptions adopted for this investigation, achieving the financing objective of between 100% and 110% of the Fund's Vested Benefits would also result in at least 100% coverage of the Actuarial Value of Accrued Benefits and SG Minimum Benefits. Hence, it is not necessary to adopt specific financing objectives in relation to these benefit liability measures.

1.4 Main items of Fund experience

The more significant factors affecting the Fund's financial experience during the period since the previous actuarial investigation as at 30 June 2019 were as follows:

Item	Assumed at previous investigation	Fund experience	Comment on effect
Investment returns	4.0% pa*/ 4.75% pa**	2.3% / 2.7%	**Negative** – investments grew at a rate lower than assumed
Average Final Fund Salary (AFFS) increases	3.75% pa	5.9% pa^	**Negative** – benefit liabilities grew more rapidly than expected for active Defined Benefit Scheme members
Indexation rate	2.5% pa	1.8% pa	**Favourable –** pensions and deferred benefits increased at a rate less rapidly than expected

* Net of investment tax and fees return on assets supporting the Defined Benefit Scheme.

** Net of fees return on assets supporting the Lifetime Pensions Scheme

^ Based on AFFS increase for each member weighted by each member's Vested Benefit.

In addition, this investigation allows for quantification of and inclusion in the valuation of the benefits for the recall allowance adjustment to members' entitlements of approximately $7.7m (refer Section 3.2 for more details). This has had a negative impact on the Fund's financial position.

Section 3 of the report provides further details of the Fund experience.

1.5 Current Institution contributions

The Institutions that participate in the Fund are currently contributing at the following rates for the Defined Benefit Scheme active members:

Member contribution rate (% of Salary)	0%	3%	4%	6%
Institution contribution rate (% of Salary)	1%	6%	6%	10%

1.6 Actuarial assumptions

Given changed market conditions, I have made some changes to the actuarial assumptions used to value the Fund as at 30 June 2020. A summary of these changes is set out below with more detail provided in Section 4. The overall impact of the updates to the financial assumptions has been to increase the Actuarial Value of Accrued Benefits by around $42m.

The main assumptions used for this investigation are:

Assumption	**% pa**
Discount Rate	
Lump sum benefits (after tax and fees)	3.0*
Pension benefits (after fees and 0% tax but including refund of imputation credits)	3.75**
Investment return***	
Lump sum benefits (after tax and fees)	3.0
Pension benefits (after fees and 0% tax but including refund of imputation credits)	3.75
General salary increases	3.0
Lifetime Pension and deferred benefit increases	2.0

* Based on an average 5-year investment horizon.

** Based on an average 10-year investment horizon.

*** Used for the purposes of asset projections only.

These assumptions take into account the following considerations:

- The investment return assumptions are based on the benchmark asset allocation of the Fund's assets and Mercer Investment Consulting's expected investment returns for different asset classes, net of expected investment expenses.
- The discount rate adopted for assets supporting active and deferred lump sum benefits is net of investment tax and fees. It assumes that these assets have an average 5-year investment horizon and allows for the lower long-term return expected on the investments held by the Fund, in particular, those for fixed interest and cash investments over this timeframe.
- The discount rate adopted for assets backing pension liabilities is net of investment fees but assumes that any income earned on these assets is exempt from tax and allows for the refund of imputation credits. It assumes these assets have an average 10-year investment horizon and allows for the lower than long-term return expected on fixed interest and cash investments over this timeframe.
- The discount rates adopted for both lump sum and pension benefits are 1% lower than those adopted in the 30 June 2019 actuarial investigation to reflect the latest market outlook.
- The general salary increase assumption is 0.75% lower to reflect the latest economic conditions.
- The long-term pension indexation assumption is 0.5% lower for consistency with the long-term expectations for CPI increases.
- An allowance for age related promotional salary increases has been made in addition to the general salary increases stated above, which is the same as used in the 2019 investigation.

See Section 4 for full details of all the assumptions used in the investigation.

1.7 Recommended level of contributions

The Fund's asset coverage of Vested Benefits is within the target coverage level of between 100% and 110%.

Accordingly, I recommend that the Institutions continue to contribute to the Fund at the following rates for the Defined Benefit Scheme active members:

Member Contribution Rate (% of Salary)	0%	3%	4%	6%
Institution Contribution Rate (% of Salary)	1%	6%	6%	10%

Over the long-term I would expect the Institutions contribution rates would reduce towards the long-term contribution rates (refer to Section 6.3).

Note that if an actuary, whilst performing an actuarial function for the Fund, discovers that any Institution has paid less than the recommended contributions, the SIS Act requires that the actuary inform the Trustee and APRA.

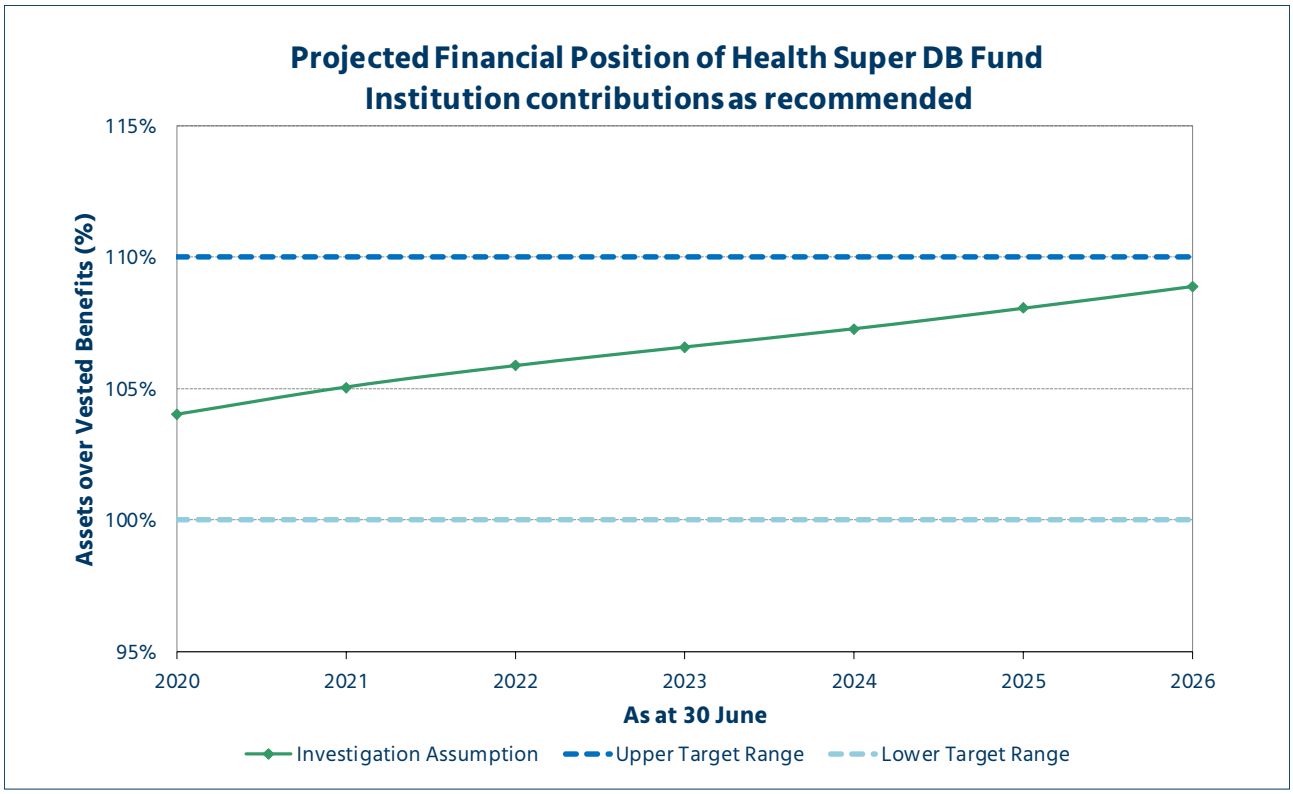
1.8 Projection of coverage of benefit liabilities

I have prepared a projection of the assets and benefit liabilities of the Fund based on:

- The recommended Institution contribution rates set out above;
- The Fund's current investment strategy;
- The actuarial assumptions adopted for this investigation; and
- Allowance for future active member movements into the deferred and lifetime pension sections at rates assumed for this investigation (see Section 4 for details of membership movement assumptions).

The following chart shows that on this basis the projected coverage of the Fund's Vested Benefits will remain within the target funding range for several years.

Section 7 of the report provides further details and commentary on the projection results.



However, the projected coverage is sensitive to the assumptions used and there are several risks which may affect the Fund's actual financial position (refer to Section 1.9 below).

1.9 Key risks and sensitivity analysis

There are a number of risks relating to the operation of the Fund. The Fund's Risk Management Strategy should identify a full range of risks faced by the Trustee. The more significant financial risks for the Fund are:

- **Investment risk** – borne by the Institutions. The risk is that investment returns will be less than anticipated and the Institutions will need to increase contributions to offset this shortfall.

  The actual investment return achieved by the Fund in the future will vary (positively or negatively) from the rate assumed at this investigation. Section 7.3 provides an illustration of the impact of investment volatility on the projected coverage of Vested Benefits over the next 10 years.

  If economic conditions change and the assumed investment return over the longer-term is lower with no change to other assumptions, this will increase the value of the Fund's liabilities. For example, if the assumed future investment returns were 1% pa lower, with no change to other assumptions, then the Fund's Actuarial Value of Accrued Benefits would increase by approximately 9.2%. This would translate to an increase of around $99 million in Actuarial Value of Accrued Benefits (or an increase of around $85 million in Vested Benefits) as at 30 June 2020. It would lead to the Fund being in an unsatisfactory financial position.

- **Pensioner longevity risk** – borne by the Institutions. The risk that the pensioners will live longer than expected requiring more pension payments thereby increasing the pension liabilities of the Fund and requiring additional contributions from the Institutions.

  I have valued pensions using our best estimate of future mortality experience. If we were to adopt more conservative mortality assumptions, this could potentially add 10% (or more) to the value of the pension liabilities.

- **Salary growth risk** – borne by the Institutions. The risk here is that wages or salaries (on which future benefit amounts will be based) will rise more rapidly than anticipated, increasing benefit amounts and thereby requiring additional Institution contributions.

  For example, if the general salary increase rate were increased by 1% pa with no change in other assumptions, then the Fund's Actuarial Value of Accrued Benefits would increase by 0.7% overall. This would translate to an increase of around $8 million in the Fund's Actuarial Value of Accrued Benefits as at 30 June 2020. However, the Fund's Vested Benefits as at 30 June 2020 are not affected by a change in the future salary assumption.

- **Indexation risk** – borne by the Institutions. The risk that the indexation applied to lifetime pensions and deferred defined benefits will be greater than expected creating a shortfall in assets that will require additional contributions from the Institutions. As the Fund's lifetime pension liabilities increase as a proportion of the Fund liabilities, indexation risk will have an increasing impact on the Fund's future liabilities.

  It is the "gap" between assumed investment earnings and the indexation rate that influences the cost of providing defined benefits. Hence, the effect of increasing the assumed pension indexation rate by 1% pa is approximately the same as reducing the assumed investment

earnings by 1% pa (see "Investment risk" above for quantification of the potential financial impact).

- **Benefit selection risk** – borne by the Institutions. The risk that the number of members, who have the option to choose a pension benefit, will choose the pension benefit in greater numbers than assumed in the actuarial investigation. A higher number of members choosing pensions than expected will increase the Fund's liabilities. Any difference will impact on the Fund's liabilities and the Institutions may need to increase contributions to finance such increases.

- **"Market value" risk attached to pension valuation** – borne by the Institutions. This is the risk that a significantly higher liability value would be obtained if the pension liabilities were to be valued on a "market value" basis. Unlike the risks above this risk impacts only the value placed on the pension liabilities and not the ultimate cost.

  The basis used to value defined benefit pension entitlements for the purposes of this investigation is considered suitable taking into account the Fund's current circumstances, including the current investment policy. If instead the pension liabilities were to be valued on a "market value" basis – that is, the amount which would be required to be paid to a third party (for example, a life office) to take on the liability – a higher pension liability value would be obtained.

  It is likely that a third party would base its pricing on a discount rate around the level of long-term Government bond rates. I estimate valuing the current pension liabilities using a discount rate of 0.6% p.a. (based on the 10 year Commonwealth Government bond rate at 30 June 2020, less 0.3% per annum as a very broad allowance for expenses), but with other assumptions unchanged, would increase the value of the current pension liabilities by over 40% or $275 million.

- **Legislative/legal risk –** borne by the Institutions. The risk is that legislative changes could be made which increase the cost of providing the defined benefits or that different legal interpretations of the Fund's rules lead to an increase in members' entitlements.

1.10 Illustration of potential investment volatility

The Fund's investments reflect the investment policy as outlined in detail in Section 8.4 of this report.

Based on simulations modelling fluctuations in investment returns only, and assuming other experience is in line with the assumptions adopted for this investigation, there is a very wide projected dispersion in Vested Benefit coverage in 10 years' time. Our modelling shows an approximately 80% chance that the coverage of assets over Vested Benefits at 30 June 2030 will fall in the range from 74% to 140%.

The Trustee conducts annual actuarial investigations, which should allow implementation of corrective action as early as possible in the event of adverse experience. Further, in the event of material developments in the intervening year, the Fund's Funding and Solvency Certificate specifies "Notifiable Events" which the Trustee needs to monitor on a regular basis to detect any adverse changes in the Fund's financial position.

The ability to improve the Fund's financial position by increasing the Institution contribution rates has reduced as the relative size of the Defined Benefit Scheme active membership reduces. The present value of future Institution contributions for Defined Benefit Scheme active members on the recommended rates is only 3% of the current Actuarial Value of Accrued Benefits. This means any shortfalls due to adverse experience would be difficult to fund by increasing contribution rates and may require large lump sum contributions. For example, in the absence of lump sum contributions funding a 3% shortfall of assets relative to liabilities would require a doubling of the recommended Institution contribution rates.

1.11 Other recommendations

1.11.1 Investment policy and liquidity

I confirm that the Fund's current investment policy remains appropriate, provided that the Institutions recognise and accept the potential variability in returns and contribution requirements (refer to Section 8.4). The Trustee continues to explore an alternative investment strategy that immunises assets and pensioner liabilities to a greater extent, recognising the increased percentage of Fund liabilities represented by the Fund pensioners.

The expected average term of the Fund's liabilities in respect of the Defined Benefit Scheme (active and deferred sections) is approximately 4 years. While a proportion of members are eligible to receive pension benefits, a large proportion will receive lump sum payments. Accordingly, there will be a significant level of benefit outflow, exceeding net contributions. This illustrates a need for the Trustee to ensure that the Fund's investments provide a suitable level of liquidity to meet projected benefit obligations.

1.11.2 Crediting policy

A detailed review of the approach for crediting earnings to members' accounts is outside the scope of this investigation. Based on a review of the main features (refer to Section 8.5), I consider that the crediting rate approach adopted is generally suitable taking into consideration the principles of equity between different generations of members and any material risks which may have a significant impact on the Fund (i.e. a market shock or sudden downturn in investment markets).

1.11.3 Insurance

As at 30 June 2020, death and disability benefits of Defined Benefit Scheme active members were insured, but there was an insurance "shortfall" of $66.4 million on their total disability benefits were all active Fund members to become disabled at the same time. However, in practice the number of members becoming disabled and taking a pension is a small portion of the Defined Benefit Scheme active membership and the risk of a large number of disablements occurring together is so small that it can be ignored.

I therefore confirm that the current group life insurance formula is appropriate and provides adequate protection for the Fund. Section 8.6 of the report provides further details.

1.11.4 Shortfall Limit

The Fund's Shortfall Limit of 98% (for the purposes of SPS 160) remains suitable. Refer to Section 9.1 for further details.

1.11.5 Action required

The Trustee should consider this report and confirm its agreement (or otherwise) to the contribution and other recommendations.

The Trustee should obtain formal agreement of each Institution that it will contribute to the Fund in accordance with the recommendations of this report.

1.12 Additional information

Significant events since the investigation date – I am not aware of any significant events that have occurred since 30 June 2020, which I have not already taken into account, which would have a material impact on the recommendations in this report.

Next actuarial investigation – as the Fund has pensioners, the SIS legislation requires annual actuarial investigations of the Fund. As such, the next annual actuarial investigation of the Fund will occur as at 30 June 2021.

Funding and Solvency Certificate – the current Funding and Solvency Certificate expires on 30 June 2024 and needs to be replaced by 30 June 2023.

Superannuation Guarantee Benefit Certificate – the current Superannuation Guarantee Benefit Certificate expires on 30 June 2023. It is required primarily by the Institutions to demonstrate compliance with its Superannuation Guarantee obligations to employees who are Fund members.

1.13 Actuary's certifications

1.13.1 Professional standards and scope

This report has been prepared in accordance with generally accepted actuarial principles, Mercer internal standards, and the relevant Professional Standards of the Actuaries Institute, in particular PS400 which applies to "...actuarial investigations of the financial condition of wholly or partially funded defined benefit superannuation funds."

1.13.2 Use of report

This investigation report should not be relied upon for any other purpose or by any party other than the Trustee of the Fund. Mercer is not responsible for the consequences of any other use. This report should be considered in its entirety and not distributed in parts.

The advice contained in this report is given in the context of Australian law and practice. No allowance has been made for taxation, accountancy or other requirements in any other country.

1.13.3 Actuarial uncertainty and assumptions

An actuarial investigation report contains a snapshot of a Fund's financial condition at a particular point in time, and projections of the Fund's estimated future financial position based on certain assumptions. It does not provide certainty in relation to a Fund's future financial condition or its ability to pay benefits in the future.

Future funding and actual costs relating to the Fund are primarily driven by the Fund's benefit design, the actual investment returns, the actual rate of salary inflation and any discretions

exercised by the Trustee or the Institutions. The Fund's actuary does not directly control or influence any of these factors in the context of an actuarial investigation.

The Fund's future financial position and the recommended Institution contributions depend on a number of factors, including the amount of benefits the Fund pays, the cause and timing of member withdrawals, Fund expense, the level of taxation and the amount earned on any assets invested to pay the benefits. These amounts and others are uncertain and unknowable at the valuation date but are predicted to fall within a reasonable range of possibilities.

To prepare this report, assumptions, as described in Section 4, are used to select a single scenario from the range of possibilities. The results of that scenario are included in this report.

However, the future is uncertain and the Fund's actual experience will differ from those assumptions; these differences may be significant or material. In addition, different assumptions or scenarios may also be within the reasonable range and results based on those assumptions would be different.

Actuarial assumptions may also be changed from one valuation to the next because of mandated requirements, Fund experience, changes in expectations about the future and other factors. I did not perform, and thus do not present, an analysis of the potential range of future possibilities and scenarios.

Because actual Fund experience will differ from the assumptions, decisions about benefit changes, investment policy, funding amounts, benefit security and/or benefit related issues should be made only after careful consideration of alternative future financial conditions and scenarios, and not solely on the basis of a set of valuation results.

1.13.4 Data and Fund provisions

To prepare this report, I have relied on financial and participant data provided by the Trustee. The data used is summarised in this report. I have reviewed the financial and participant data for internal consistency and general reasonableness and, following some amendments, believe it is suitable for the purpose of this report. I have not verified or audited any of the data or information provided.

I have also relied upon the documents, including amendments, governing the Fund as provided by the Trustee. The Trustee is ultimately responsible for the validity, accuracy and comprehensiveness of this information. If the data or Fund provisions are not accurate and complete, the valuation results may differ significantly from the results that would be obtained with accurate and complete information; this may require a revision of this report.

1.13.5 Conflict of Interest

This investigation has been undertaken by Timothy Jenkins, FIAA of Mercer Consulting (Australia) Pty Ltd as actuary to the Fund. A related entity, Mercer Administration Services (Australia) Pty Ltd, is the Fund Administrator. In my view, there is no conflict of interest in Mercer Consulting (Australia) undertaking this investigation. The purpose of the actuarial investigation is not to audit the Fund Administrator or the Fund's administration membership records. Data shortcomings identified in the course of carrying out this work have been brought to the attention of Fund management.

1.13.6 Further information

If requested, I am available to provide any supplementary information and explanation about the actuarial investigation.

Prepared by

Timothy Simon Jenkins
Fellow of the Institute of Actuaries of Australia

17 August 2020

I have reviewed this report under Mercer's professional Peer Review Policy. I am satisfied that it complies with applicable professional standards and uses assumptions and methods which are suitable for the purpose.

Richard Boyfield
Fellow of the Institute of Actuaries of Australia

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Information and Data

2.1 Data

For the purposes of this investigation, the Trustee provided the following:

1. Data for all persons who were active or deferred members of the Defined Benefit Scheme or pensioners in the Lifetime Pension section of the Fund at any time during the period from 31 March 2019 to 31 March 2020;
2. Details of rates of indexation applied to Lifetime Pension and deferred defined benefit balances;
3. An estimate of the net of tax investment earnings of the Fund assets for the year to 30 June 2020; and
4. The net value of Fund assets as at 31 March 2020.

Members' account balances, defined benefit multiples and pension amounts were appropriately adjusted for the period from 31 March 2020 to 30 June 2020.

2.2 Data validity

I have relied on the data provided by the Fund Administrator on behalf of the Trustee, performing reasonableness checks on the data provided which highlighted some inconsistencies. We made adjustments to allow for these inconsistencies, consistent with the approach adopted for the previous actuarial investigation.

As per prior years', the salary and AFFS data provided by the administrator as at 31 March 2020 appeared to have significant problems. This is not unexpected and relates to the salary and service fraction data being advised by the Institutions each fortnight/month rather than any problem with the way the data queries were run.

We were provided with salaries as at 30 June 2019 and a complete salary and service fraction history over the 2 years to 31 March 2020 for each active member. We used the history to estimate a projected salary as at 30 June 2020. Our analysis indicates:

- Actual salaries as at 30 June 2019 were around 1.6% higher on average than the salaries we adopted for the 30 June 2019 actuarial investigation.
- 85% of active members had a "reasonable" movement when comparing the 30 June 2019 salary provided with our calculated 30 June 2020 salary. We have defined "reasonable" to be a movement between -2% and +25%.
- 13% of active members had a salary movement since 2019 which was less than -2%.
- The average salary change for members with "reasonable" salary movements was 5.0%.

We have calculated a 30 June 2020 salary for those with unreasonable movements based on the 30 June 2019 salary provided in this year's data increased by 5.0%.

2.3 Available assets

The Fund Administrator advised us on 15 June 2020 that the net value of the Fund assets as at 31 March 2020 was $1,104.2 million. I understand that this value does not include any portion of the Scheme's Administration Reserve or Operational Risk Financial Requirement Reserve.

I have rolled forward the value of assets from 31 March 2020 to 30 June 2020 by allowing for known benefit payables, actual contributions, pension payments, expenses, contribution tax and investment earnings (at 2.7%, based on returns for April, May and June advised by the Fund Administrator). I have also increased the assets by an estimated pension tax exemption adjustment for 2018/19 and 2019/20 of $3.6 million.

The total Fund assets adopted for the purposes of the 30 June 2020 actuarial investigation is $1,118.3 million as set out below.

	$m
Net Assets as at 31 March 2020	1,104.2
Due and unpaid benefits at 31 March 2020	(4.6)
Cash flow assumed for April, May and June	(8.8)
Investment earnings assumed for April, May and June	29.6
Pension tax exemption for 2018/19 and 2019/20 (estimate)	3.6
Top-up amount payable to former Fund members impacted by recall allowance (gross of 15% tax)	(5.7)
Net Assets as at 30 June 2020	1,118.3

2.4 Membership

The actuarial review of the Fund as at 30 June 2020 was based on the following data:

- 1,390 Health Super Defined Benefit Scheme active members with total full time equivalent salaries of $149.9 million (or Average Fund Final Salary of $146.3 million);
- 1,824 members with deferred benefits in the Health Super Defined Benefit Scheme; and
- 3,205 pensioners in the Health Super Lifetime Pension section with annual pensions of $43.9 million.

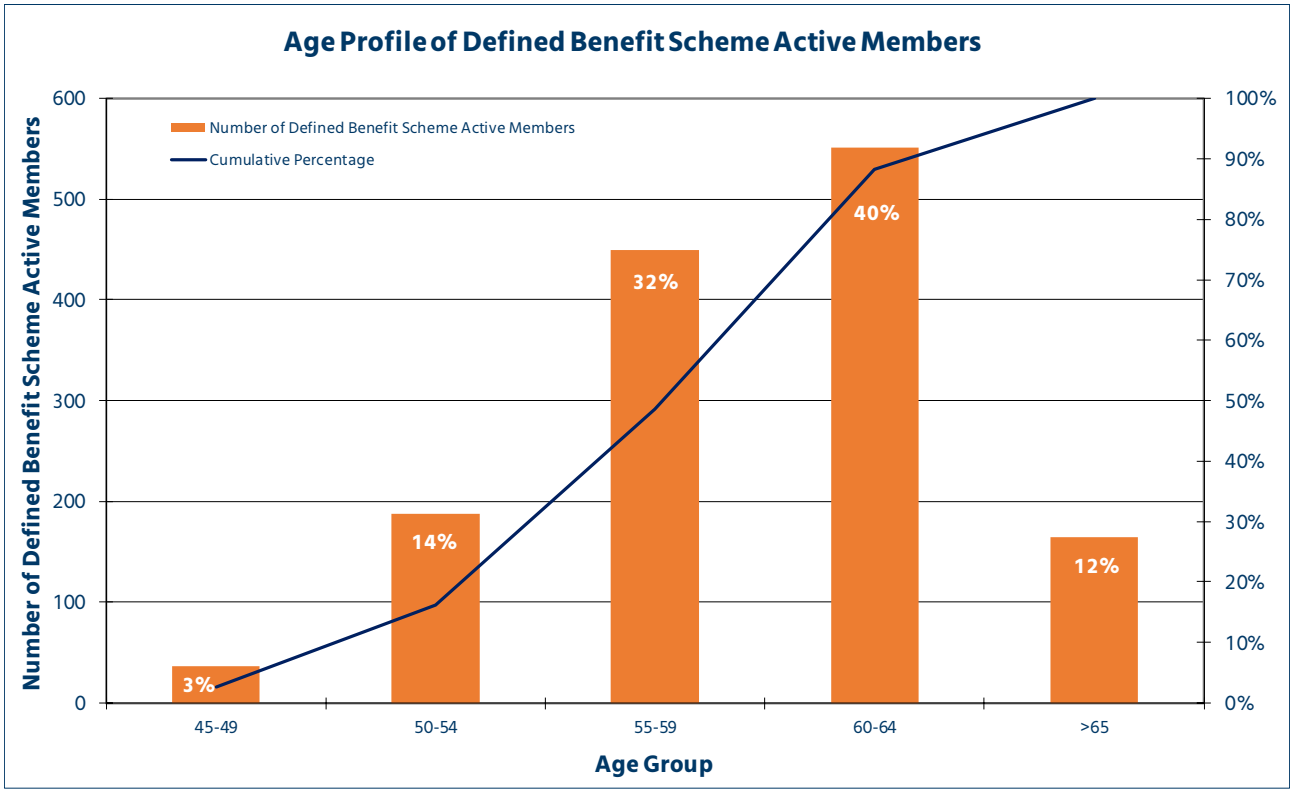
2.4.1 Defined Benefit Scheme – active membership

A summary of the Defined Benefit Scheme active membership by member contribution rate as at 30 June 2020 is as follows:

	0% Contributors		3% and 3.5% Contributors		4% contributors		6% contributors	
Age Group	**Number**	**Total Salaries* ($000)**	**Number**	**Total Salaries* ($000)**	**Number**	**Total Salaries* ($000)**	**Number**	**Total Salaries* ($000)**
45-49	10	969.3	9	961.5	4	346.7	14	1,191.5
50-54	36	4,907.2	33	3,315.5	29	2,826.9	90	8,590.5
55-59	51	5,731.3	69	6,420.2	46	4,339.3	284	29,099.8
60-64	40	4,861.5	90	8,851.0	63	7,041.8	358	40,887.6
>65	140	16,321.4	2	185.4	3	275.0	19	2,785.9
Totals	**277**	**32,790.7**	**203**	**19,733.6**	**145**	**14,829.7**	**765**	**82,555.3**

* Salaries in the above table are equivalent full time salaries.

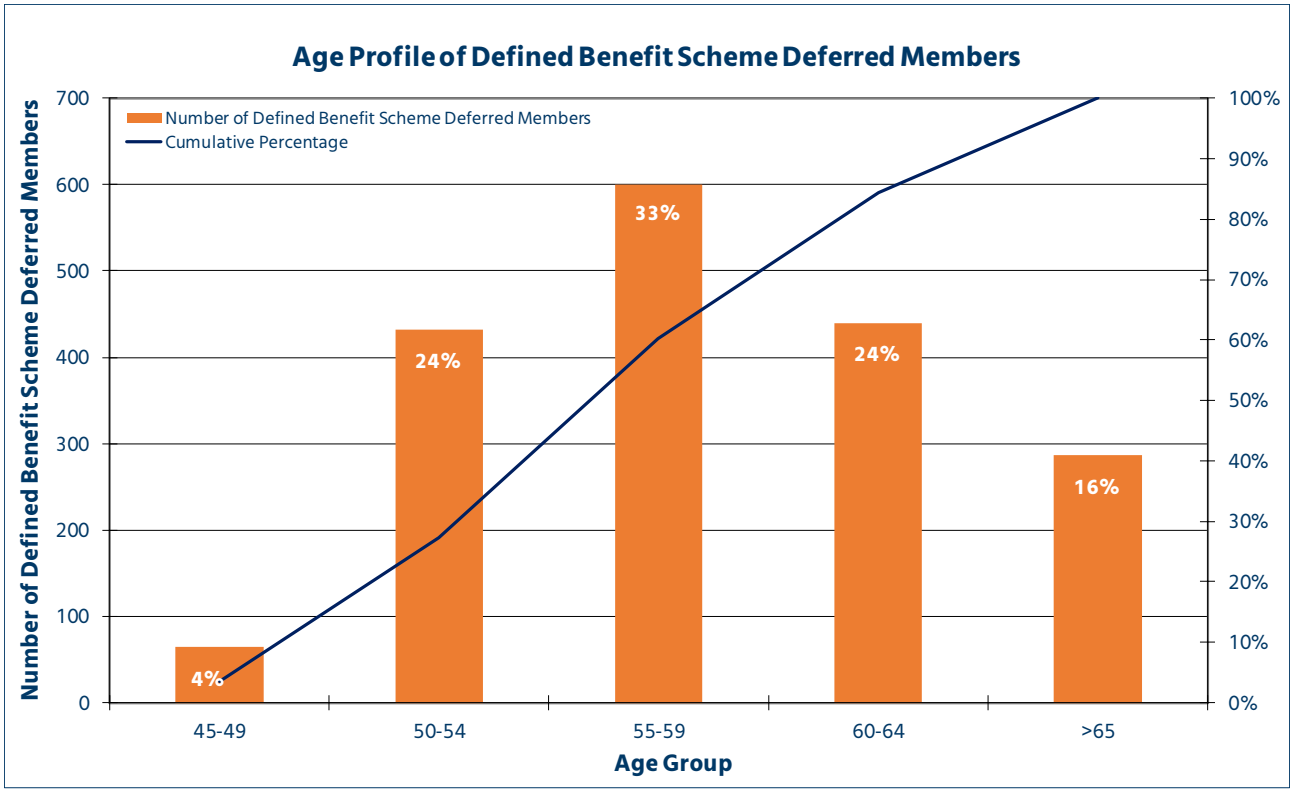
The Defined Benefit Scheme active membership as at 30 June 2020 by age group is shown in the following graph:



As shown in the graph, 84% of the Defined Benefit Scheme active membership is over age 55 and therefore eligible for retirement as at 30 June 2020. A further 14% will become eligible for retirement in the next five years.

2.4.2 Defined Benefit Scheme – deferred membership

The Defined Benefit Scheme deferred membership as at 30 June 2020 by age group is shown in the following graph:



As shown in the graph, 73% of the Defined Benefit deferred section membership is over age 55 and therefore eligible for retirement benefits as at 30 June 2020. A further 24% will become eligible for retirement benefits in the next 5 years. I note that whilst members over the age of 55 could withdraw their benefits at any time, members below the age of 55 can also transfer a discounted lump sum into another eligible superannuation fund at any time.

2.4.3 Health Super Lifetime Pension

A summary of pensioners in this section as at 30 June 2020 is as follows:

Pension Type	Number of Pensioners	Average Age	Annual Pension $000
Retirement	2,182	76.6	34,783
Spouse	511	84.1	4,020
Disablement	512	76.5	5,133
Child	0	N/A	0
Total	**3,205**	**77.7**	**43,936**

3

Fund Experience since Last Investigation

3.1 Economic experience

3.1.1 Investment returns

The 30 June 2019 investigation assumed that investment returns would average 4.0% pa (net of tax and investment fees) on non-pension assets and 4.75% pa (after fees and 0% tax but allowing for the refund of franking credits) on assets supporting pensions.

The Fund's investment return (net of tax and investment fees) on non-pension assets was 2.3% over the year to 30 June 2020. I am not advised a percentage investment return for pension assets but assuming an effective tax rate of 13% the return on pension assets would have been around 2.7%.

The lower than assumed investment returns have had a negative impact on the Fund's financial position.

3.1.2 Salary increases

I note that in many individual cases the change in salary from 30 June 2019 to 30 June 2020 is outside the range we would expect. However, this is the information that was provided to the Trustee by the Institutions. As a result, for 15% of the membership we adopted (full time equivalent) salaries based on their 2019 salary increased at 5.0%. We then recalculated the AFFS for these members based on their revised 2020 salary figure.

Based on the revised data, over the 12 months to 30 June 2020:

- Average salary increases were 6.7% and average AFFS increases 6.4%;
- Weighting the salary increases by members' liabilities the average salary and AFFS increase was 5.9%.

At the 2019 investigation, it was assumed that salary increases would be 3.5% pa plus age related promotional increases such that average total salary increases would be expected to be around 4% per annum. As the benefit weighted basis average salary/AFFS increases were 5.9% and therefore higher than the 4% expected, this had a negative impact on the Fund's financial position.

3.1.3 Contributions

Since the previous investigation, participating Institutions have contributed to the Fund in accordance with the actuarial recommendations. As the recommended contribution rates exceed the long-term rates required to fund the accrual of defined benefits, this has had a positive impact on the Fund's financial position.

3.1.4 Pension and deferred benefit indexation

Lifetime pensions and deferred defined benefits are indexed based on changes in the Consumer Price Index (CPI).

At the 30 June 2019 actuarial investigation, it was assumed that the indexation rate would be 2.5% pa. As the actual indexation rate of 1.8% was less than expected, this had a positive impact on the Fund's financial position.

3.2 Recall allowance rectification impact

The recall allowance issue is expected to be fully resolved in the remainder of the 2020/21 year. I have recently written to the Trustee quantifying the financial impact of inclusion of recall allowances within the definition of salary for members and former members of the Fund (refer to my report dated 13 May 2020).

The top-up amount payable to impacted former Fund members who already received a lump sum amount was valued at $4.7 million as at 30 June 2019. Allowing for investment earnings over the year to 30 June 2020 and grossed up for 15% tax, value of the top-up contribution required as at 30 June 2020 is $5.7 million. I have allowed for this amount in the value of available assets as at 30 June 2020 (refer to Section 2.4).

In addition, the recall allowance issue is also expected to increase the value of current deferred member and pensioners by $1.8 million as at 30 June 2019. I have allowed for an additional $2 million in the 30 June 2020 liability figures shown in this report as a result.

This therefore had an estimated negative impact of $7.7 million on the Fund's financial position.

3.3 Summary

I have determined that Fund assets are in excess of the Fund's Vested Benefits by $43.1 million as at 30 June 2020. The actuarial investigation as at 30 June 2019 revealed that Fund assets were in excess of the Fund's Vested Benefits by $103.0 million. Therefore, the Fund's financial position has decreased by $59.9 million over the year to 30 June 2020. The main factors impacting the Fund's coverage of Vested Benefits were:

- The Fund's actual investment return being lower than assumed (estimated negative impact of $21.3m); and
- Institutions' contributions being paid at rates higher than the long term cost (estimated positive impact of $3.2m);
- The average benefit weighted AFFS increase being higher than assumed (estimated negative impact of $7.3m);
- The actual pension indexation being lower than assumed (estimated positive impact of $4.0m);
- The impact of recall allowance rectification (estimated negative impact of $7.7m); and
- The change in actuarial assumptions adopted for this investigation (estimated negative impact of $36.1m).

Ultimately, the cost to Institutions of maintaining the Fund depends on actual experience, not actuarial assumptions. The actuarial assumptions primarily influence the timing of contributions to the Fund. However, it is possible for experience to differ from that assumed without changes to the Institution's contributions being required, as the financial impact of variations in some areas can offset variations in others.

4

Actuarial Assumptions and Methods

This section sets out the actuarial assumptions and methods used for this investigation as at 30 June 2020.

4.1 Method of calculating the Actuarial Value of Accrued Benefits

I have calculated the Actuarial Value of Accrued Benefits using a method of apportionment of benefits between past and future membership that satisfies the requirements of Professional Standard No. 402 of the Actuaries Institute and is acceptable for Australian Accounting Standard AASB 1056 purposes. The method used for the determination of the Actuarial Value of Accrued Benefits is the same as that used at the previous investigation.

4.2 Economic assumptions

The major assumptions influencing the cost of defined benefits are:

- The assumed investment earnings;
- The indexation rate assumed to apply to pensions and deferred benefits; and
- The salary increase assumption used in the projections of future benefit payments, though this assumption is becoming less significant with the decline in the active section of the Fund.

The difference, or "gap", between the assumed investment return and the level of pension indexation (or, to a lesser extent, the salary increase assumption) is the key factor.

The economic assumptions adopted for this investigation are:

Assumption	% pa
Discount Rate	
Lump sum benefits (after tax and fees)	3.0*
Pension benefits (after fees and 0% tax but including refund of imputation credits)	3.75**
Investment return***	
Lump sum benefits (after tax and fees)	3.0
Pension benefits (after fees and 0% tax but including refund of imputation credits)	3.75
General salary increases	3.0
Lifetime Pension and deferred benefit increases	2.0

* Based on an average 5-year investment horizon.

** Based on an average 10-year investment horizon.

*** Used for the purposes of asset projections only.

These assumptions take into account the following considerations:

- The investment return assumptions are based on the benchmark asset allocation of the Fund's assets and Mercer Investment Consulting's expected investment returns for different asset classes. The expected investment expenses applying to these assets have also been taken into account.
- The discount rate adopted for assets supporting active and deferred lump sum benefits is net of investment tax and fees. It assumes that these assets have an average 5-year investment horizon and allows for the lower long-term return expected on the investments held by the Fund, in particular, those for fixed interest and cash investments over this timeframe.
- The discount rate adopted for assets backing pension liabilities is net of investment fees but assumes that any income earned on these assets is exempt from tax and allows for the refund of imputation credits. It assumes these assets have an average 10-year investment horizon and allows for the lower than long-term return expected on fixed interest and cash investments over this timeframe.
- The discount rates adopted for both lump sum and pension benefits are 1% lower than those adopted in the 30 June 2019 actuarial investigation to reflect the latest market outlook.
- The general salary increase assumption is 0.75% lower to reflect the latest economic conditions.
- The long-term pension indexation assumption is 0.5% lower for consistency with the long-term expectations for CPI increases.
- An allowance for age related promotional salary increases has been made in addition to the general salary increases stated above, which is the same as used in the 2019 investigation.

4.3 Other assumptions

The assumptions set out below are the same as adopted in the 30 June 2019 actuarial investigation.

4.3.1 New members

The Defined Benefit Scheme is in effect closed to new members. Members of the former Basic Benefit Scheme are able to join but past Fund experience indicates that very few do so. Therefore, I have assumed that no new members join the Defined Benefit Scheme in the future.

4.3.2 Expenses

For the Defined Benefit Scheme, I have assumed administration expenses at 1.0% of active members' salaries. For the Lifetime Pension section, I have assumed administration expenses at 2.0% of total annual pension payments.

4.3.3 Tax

All future Institution contributions are currently subject to 15% contribution tax, after deduction of any insurance premiums and administration and management costs. All contribution recommendations quoted in this report are gross of contribution tax.

4.3.4 Proportions married

It is assumed that 70% of pensioners, and 90% of Defined Benefit Scheme active members are married, or have dependants.

4.3.5 Spouse ages

Husbands are assumed to be three years older than wives.

4.3.6 Medical classifications (death and disablement benefits)

It is assumed that all members are entitled to standard death and disablement benefits.

4.3.7 Defined Benefit Scheme - active members

The following additional assumptions have been made in respect of active members of the Defined Benefit Scheme:

Transfer of deferred benefits

I have assumed that 2% of active members leaving prior to age 55 immediately transfer their deferred benefit out of the Fund.

Division D – Old Scheme Benefits

Division D members are entitled to elect to receive Old Scheme Benefits (lump sum plus pension benefits). I have assumed the following for this investigation:

Benefit Type	Proportion of Eligible Members electing Old Scheme Benefits
Retirement	80%
Death	50%
Disablement	70%
Resignation	80%

Promotional salary increases

Members are assumed to receive promotional salary increases, in addition to general inflationary salary increases, according to an age-related scale. Specimen promotional increases are:

Age Last Birthday	Promotional Salary Increase (%)
40	0.6
45	0.6
50	0.7
55	0.5
60	0.2

Mortality and disablement

The number of members (per 100,000) assumed to leave the Fund due to death and disablement are:

Age Last Birthday	Death		Disablement
	Male	Female	Male and Female
40	73	40	38
45	102	62	58
50	152	94	127
55	227	136	272
60	361	218	307

Resignations

The number of members (per 100,000) assumed to leave the Fund on account of resignation are:

Age Last Birthday	Resignation	
	Male	Female
40	5,525	4,180
45	3,500	2,560
50	3,500	2,560

Early retirement

The number of members (per 100,000) assumed to leave the Fund on account of early retirement are:

Age Last Birthday	Retirement (Male and Female)
55	8,000
56	6,000
57	6,000
58	7,000
59	8,000
60	15,000
61	10,000
62	13,000
63	15,000
64	22,000
65	100,000

Retrenchment

Due to the nature of retrenchments, it is difficult to predict the number of retrenchments that may occur. Therefore, no members are assumed to be retrenched by the Institutions.

4.3.8 Defined Benefit Scheme - deferred members

The following additional assumptions have been made in respect of deferred members of the Defined Benefit Scheme:

Transfer of deferred benefits

I assumed that 1% of deferred members in the Defined Benefit Scheme will transfer their benefit out of the Fund each year.

Death

I have adopted the same mortality assumptions for the Defined Benefit Scheme deferred members as for the active members. The number of members (per 100,000) assumed to leave the Fund due to death are:

Age Last Birthday	Death	
	Male	Female
40	73	40
45	102	62
50	152	94
55	227	136
60	361	218

Disablement

I have assumed that no deferred member will leave the Fund due to disablement.

Early retirement

The number of members (per 100,000) assumed to leave due to early retirement are:

Age Last Birthday	Retirement (Male and Female)
55	20,000
56	9,000
57	8,000
58	8,000
59	8,000
60	12,000
61	10,000
62	8,000
63	8,000
64	8,000
65	100,000

Benefit option selection for Option 3 members

I have maintained the assumption from the 2019 investigation that 75% of Option 3 members take a lump sum plus pension (Old Scheme Benefit) and 25% take a lump sum only.

4.3.9 Health Super Lifetime Pension

The following additional assumptions have been made in respect of pensioners in the Lifetime Pension Section:

Death - retirement pensioners

The number of retirement pensioners (per 100,000) assumed to leave the Fund due to death are:

Age Last Birthday	Retirement pensioner mortality (base rates) per 100,000		Annual retirement pensioner mortality improvement discount	
	Male	Female	Male	Female
60	403	231	3.33%	2.52%
65	686	432	3.29%	2.52%
70	839	664	3.08%	2.45%
75	1,731	1,472	2.73%	2.30%
80	4,143	3,022	2.21%	2.07%
85	7,838	6,927	1.61%	1.62%
90	14,174	11,547	1.07%	1.03%
95	22,384	22,457	0.78%	0.68%
100	30,259	32,123	0.51%	0.47%
105	100,000	100,000	0.24%	0.26%

The base pensioner mortality rates are multiplied by (1 – the annual retirement pensioner mortality improvement discount) for the number of years since 30 June 2007.

Death - spouse pensioners

Age Last Birthday	Pensioner mortality (base rates) per 100,000	
	Male	Female
60	366	231
65	624	432
70	1,164	664
75	2,404	1,472
80	4,603	3,022
85	8,709	6,927
90	15,749	11,547
95	24,871	22,457
100	33,621	32,123
105	100,000	100,000

Death - disablement pensioners

The number of disablement pensioners (per 100,000) assumed to leave the Fund due to death are based on Australian Life Table 2005-2007 (as per the below).

Age Last Birthday	Disablement pensioners mortality	
	Male	Female
60	721	436
65	1,200	679
70	1,920	1,115
75	3,312	1,982
80	5,760	3,661
85	9,907	7,088
90	16,286	13,094
95	23,106	20,895
100	28,205	28,281
105	100,000	100,000

4.4 Impact of assumption changes

The following table summarises the changes in assumptions from those used in the previous investigation and their impact on the investigation results.

Assumption	Change	Impact
Active and pension discount rates	Decreased by 1% pa	Negative
General salary increase rate	Decreased by 0.75% pa	Positive
Lifetime pension and deferred benefit increases	Decreased by 0.5% pa	Positive

The overall impact of the changes in assumptions was to increase the Actuarial Value of Accrued Benefits by $41.9m.

5
Investigation results

5.1 Measures of benefit liabilities

The following measures of benefit liabilities have been used in this investigation.

Vested Benefits – the benefits payable as of right if all members resigned or, if eligible, retired at the investigation date. Coverage of less than 100% of these benefits would mean that the Fund is in an "Unsatisfactory Financial Position" as defined under the SIS legislation. The Fund's current financing objective is to target coverage of Vested Benefits of between 100% and 110%.

Section 1.8 of this report provides a projection of coverage of Vested Benefits over the next few years, and reflects the effects of any significant changes in Vested Benefits for members.

Actuarial Value of Accrued Benefits – an actuarial value of all future expected benefit payments, attributable to membership to date, discounted to the investigation date. These benefits are calculated using the actuarial methods and assumptions set out in Section 4 of this report. This value is consistent with Accrued Benefits for the purposes of AASB 1056.

The benefit applicable on early retirement for members of the Fund will often exceed the Actuarial Value of Accrued Benefits, and so coverage of Vested Benefits may be a more important indicator of the financial strength of the Fund. However, the Vested Benefit for members not yet eligible for early retirement will generally be less than the Actuarial Value of Accrued Benefits, and so changes in members' ages over time could result in significant changes in the coverage level of Vested Benefits.

SG Minimum Benefits – the benefits determined in accordance with the Fund's Benefit Certificate, being the minimum amounts required from this Fund to satisfy the Institution's obligations under Superannuation Guarantee legislation. If assets do not provide at least 100% coverage of SG Minimum Benefits (known as MRBs), the Fund is classified as being 'technically insolvent' under relevant Commonwealth superannuation legislation.

5.1.1 Vested Benefits

I estimate the total Vested Benefits of the Fund as at 30 June 2020 to be $1,075.2 million. The Vested Benefits attributed to the various sections of the Fund are as follows:

	30 June 2020 ($M)
Health Super Lifetime Pensions	648.4
Health Super Defined Benefit Scheme – active members	362.1
Health Super Defined Benefit Scheme – deferred members	64.7
Total	**1,075.2**

5.1.2 Actuarial Value of Accrued Benefits

I estimate the Actuarial Value of Accrued Benefits of the Fund as at 30 June 2020 to be $1,076.0 million. The Actuarial Value of Accrued Benefits attributed to the various sections of the Fund are as follows:

	30 June 2020 ($M)
Health Super Lifetime Pensions	648.4
Health Super Defined Benefit Scheme – active members	362.9
Health Super Defined Benefit Scheme – deferred members	64.7
Total	**1,076.0**

5.2 Coverage of benefit liabilities

5.2.1 Coverage of benefit liabilities at 30 June 2020

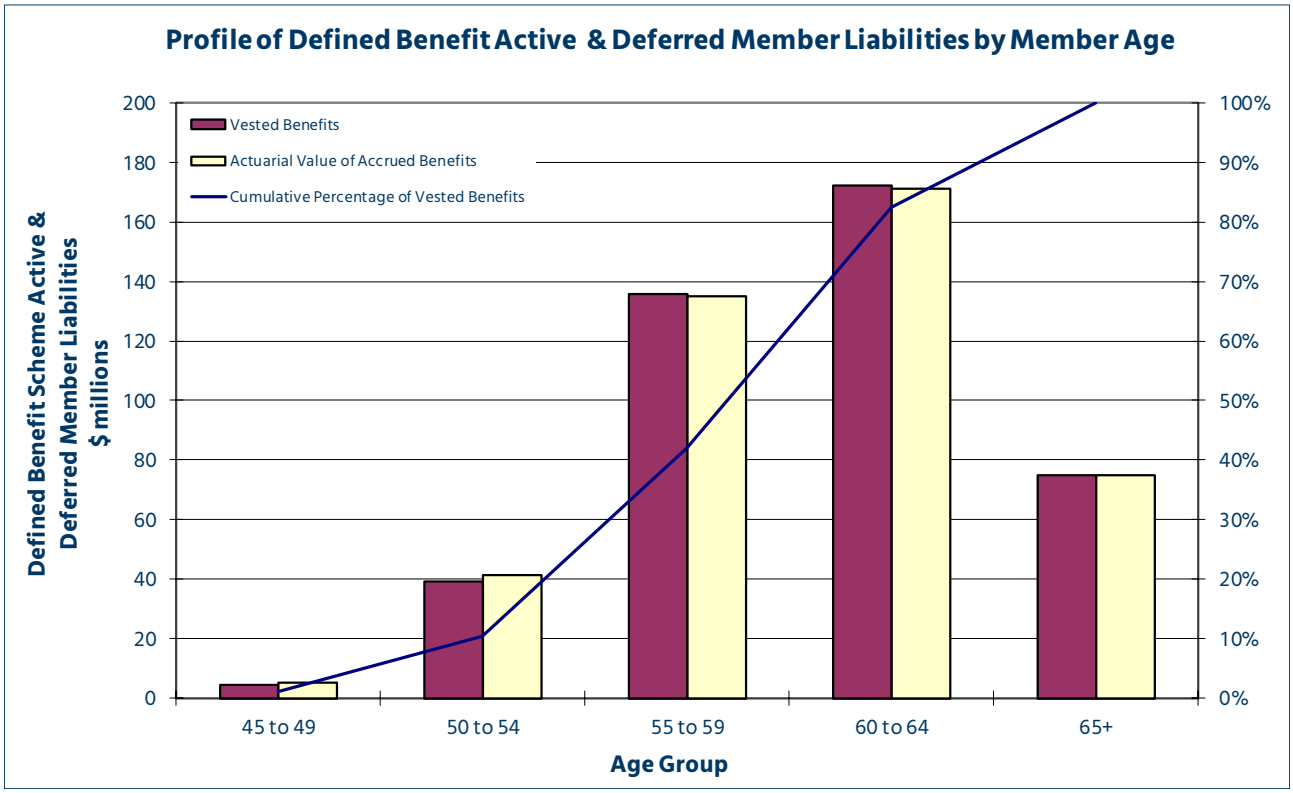
As at 30 June 2020, the Fund's Vested Benefits and the Actuarial Value of Accrued Benefits were covered by the Fund's assets. The following table sets out the coverage of the benefits as at 30 June 2020, with the corresponding values at prior years for comparison.

	Coverage of Benefits by Assets			
As at 30 June	**2020**	**2019**	**2018**	**2017**
Vested Benefits	104.0%	109.6%	106.4%	104.5%
Actuarial Value of Accrued Benefits	103.9%	110.2%	107.0%	105.3%

According to the SIS legislation, the Fund is in a "satisfactory financial position" as at 30 June 2020 as the Vested Benefits are less than the value of the assets.

5.2.2 Cover for Defined Benefit Scheme liabilities

The following graph shows the Vested Benefits and Actuarial Value of Accrued Benefits of the Defined Benefit Scheme members, including active and deferred members, at 30 June 2020, split by age.



The graph shows that approximately 90% of the Defined Benefit Scheme Vested Benefits relates to the members who are over age 55 and therefore eligible for retirement.

5.2.3 Cover for Minimum Requisite Benefits of Defined Benefit Scheme active members

The Fund is used to meet the Superannuation Guarantee requirements in respect of members in the Defined Benefit Scheme. The minimum benefit payable in respect of these Fund members, known as the Minimum Requisite Benefit ("MRB"), is described in the Fund's Superannuation Guarantee Benefit Certificate.

For active members in the Defined Benefit Scheme, Institutions' Superannuation Guarantee contributions are paid to accumulation accounts external to the Fund. The MRB within the Defined Benefit Scheme for the active members consists of the member contribution component and some pre-1992 benefit components, as defined in the Fund's Superannuation Guarantee Benefit Certificate. The value of Minimum Requisite Benefits in respect of the Defined Benefit Scheme active members as at 30 June 2020 is $192.4 million.

If it is assumed that lifetime pension benefits and Defined Benefit Scheme deferred member benefits are fully funded, then the value of assets available to meet the minimum benefits in respect of the Defined Benefit Scheme active members is $405.2 million.

The following table sets out the coverage by these assets of the Minimum Requisite Benefits for the Defined Benefit Scheme active members as at 30 June 2020, with the corresponding values at prior years for comparison.

	Coverage of Defined Benefit Scheme Active section Members' Minimum Requisite Benefits			
As at 30 June	**2020**	**2019**	**2018**	**2017**
Minimum Requisite Benefits	210.6%	231.4%	215.5%	203.2%

5.2.4 Coverage of benefits on Fund termination

If the Fund is terminated, the liability under the governing rules is limited to whatever assets are then held in the Fund. Accordingly, it is important for the Trustee to maintain assets in excess of 100% of the Vested Benefits of the Fund.

5.3 Valuation results in summary

The actuarial projection of possible future experience produced the following results, where projected future payments have been converted to a present value using the assumed discount rates.

Item	**Value on Actuarial Assumptions $M**
Present value of future pension payments accrued at investigation date in respect of Health Super Lifetime Pension members	648.4
Present value of future defined benefit payments accrued at investigation date in respect of Health Super Defined Benefit Scheme deferred members	64.7
Present value of future defined benefit payments accrued at investigation date in respect of Health Super Defined Benefit Scheme active members	362.9
Present Value of future defined benefit payments accruing after investigation date in respect of Health Super Defined Benefit Scheme active members	31.6
Present Value of future Fund operating costs and tax on contributions	20.0
Total present value of future payments out of Fund	**1,127.6**
Value of Fund assets available to support Fund liabilities at 30 June 2020	1,118.3
Present Value of future Institutional contributions at recommended rates	32.2
Present Value of future member contributions (at rates specified in the Trust Deed)	18.7
Total available assets (in absence of other contributions)	**1,169.2**
Excess/(Deficiency) of assets to value of future payments	**41.6**

This result demonstrates that based on the assumptions adopted for this investigation the recommended Institution contribution rates are higher than the long term rates required to finance the defined benefit entitlements. However, these higher contribution rates remain appropriate because the coverage of Vested Benefits by assets is currently in the middle of the financing objective range of 100% to 110% of Vested Benefits adopted for this investigation.

6
Contributions

The actuarial process includes projections of possible future Fund experience based on relevant actuarial assumptions. These projections allow for investment returns, salary/wage increases, pension indexation rates, crediting rates, rates at which members cease service for different reasons, and various other factors affecting the experience of the Fund. It is not expected that these assumptions will be precisely borne out in practice, but rather that in combination they will produce a model of possible future experience that is considered a suitable basis for setting contribution rates.

6.1 Financing objective

The financing objective adopted for the previous investigation of the Fund as at 30 June 2019 was to ensure assets were at least equal to 100% of the Vested Benefits of the Fund, but to target and then maintain assets at least equal to 110% of the Vested Benefits of the Fund.

Most of the Fund's liabilities (defined benefit and lifetime pension) are not linked to the returns on the underlying assets. A margin in excess of 100% coverage of the Fund's Vested Benefits is therefore desirable to provide some security against adverse experience such as poor investment returns.

Given the number of Institutions contributing to the Fund, it is desirable if there is stability in the Institutions' contribution rate. Accordingly, I have formalised adoption of a funding target range for this investigation. I consider that targeting a funding range of between 100% and 110% coverage of Vested Benefits strikes a suitable balance between the Trustee's desire to provide security to members and stable contribution rates for the Institutions, whilst avoiding an unnecessary build-up of surplus.

This target funding range recognises:

- The current funding position of the Fund which falls in the middle of this range;
- The Institutions' contribution rates which are slightly higher than the long-term cost of providing benefits for active members; and
- That due to the maturity of the active membership and the significant number of pensioners and deferred pensioners, any shortfalls are difficult to fund by increasing contributions, other than by large lump sums.

Based on the assumptions adopted for this investigation, achieving the financing objective of between 100% and 110% of the Fund's Vested Benefits would also result in at least 100% coverage of the Actuarial Value of Accrued Benefits and SG Minimum Benefits. Hence, it is not necessary to adopt specific financing objectives in relation to these benefit liability measures.

6.1.1 Provisions of the Trust Deed

The rules of the Fund's Trust Deed include requirements that:

- The Trustee must "take any action in order to comply with superannuation law" (Rule 1.A.21.4(a)) which includes ensuring an actuarial investigation of the Fund is conducted when required by legislation. Accordingly actuarial investigations are carried out annually; and
- Participating Institutions "contribute to the Fund at any particular time the amount or rate of contributions determined by the Trustee after obtaining the advice of the actuary" (Rule 3.B.7.1).

6.1.2 Professional standards

This report satisfies the requirements of Professional Standard 400 of the Actuaries Institute relating to the investigation of the financial position of defined benefit superannuation funds. It also meets the requirements of SIS Regulation 9.29A for an annual actuarial investigation.

Under Professional Standard 400 issued by the Actuaries Institute, the Funding method selected by the actuary should *"... generally aim to ensure that, to the extent possible:*

(a) members' benefit entitlements (including any pension increases provided by the Trust Deed or in accordance with either precedent or the intentions of the Trustee and/or Fund Sponsor) are fully funded before the members retire; and

(b) the assets of the Fund from time to time, after making full provision for the entitlements of any beneficiaries or members who have ceased to be employed, exceed the aggregate of benefits which employed members would reasonably expect to be payable to them on termination of membership, including the expenses of paying those benefits, and having regard to the provisions of the Trust Deed and the likely exercise of any Options or Discretions." (Paragraph 5.5.4 of PS400).

Accordingly, the actuary needs to be satisfied that any funding program is expected to provide a level of assets which meets or exceeds immediate benefit entitlements based on members' reasonable expectations. Should assets fall below that level, the funding program needs to aim to lift assets to at least the required level over a reasonable time period and to maintain assets at or above the required level thereafter.

The financing objective has been set on the basis that members' reasonable expectations on termination would be to receive their Vested Benefit entitlement including the lump sum value of any pension entitlements, on the actuarial assumptions adopted for this investigation.

6.2 Financing the benefits

6.2.1 Ultimate cost of providing Fund benefits

The ultimate cost to the Institutions of providing Fund benefits is:

- the amount of benefits paid out; plus
- the expenses of running the Fund, including tax;

less

- members' contributions; and
- the return on investments.

The ultimate cost to each Institution will not depend on the actuarial investigation assumptions or methods used to determine the recommended Institution contribution rates, but on the actual experience of the Fund. The financing method and actuarial assumptions adopted will however affect the timing of the cost to the Institutions.

6.2.2 Financing method

There are various financing methods that could be followed when determining Institution contributions. This investigation uses the "Target Funding" method, which was also used at the previous investigation.

Under this method, the Institution contribution rates required to provide a target level of coverage of a particular benefit liability measure is determined. The Fund's target financing objective is detailed in Section 1.3 of this report.

Over time, the level of contributions may vary significantly and will depend on the Fund's actual experience relative to that expected. If actual experience differs significantly from that expected, the level of Institution contributions may need to be adjusted to ensure the Fund remains on course towards its financing target.

I consider that the Target Funding method is suitable in the Fund's current circumstances as it allows the recommended contribution rate to be determined specifically to meet the Fund's financing objective.

6.3 Long term contributions

Based on the assumptions adopted for this investigation I have calculated the following long term contribution rates for the active members of the Defined Benefit Scheme:

Member Contribution Rate (% of Salary)	0%	3%	4%	6%
Institution Contribution Rate (% of Salary)	1.1%	1.3%	1.6%	6.1%

6.4 Current contributions

The Institutions that participate in the Fund are currently contributing at the following rates for the Defined Benefit Scheme active members:

Member Contribution Rate (% of Salary)	0%	3%	4%	6%
Institution Contribution Rate (% of Salary)	1%	6%	6%	10%

6.5 Recommended level of contributions

The Fund's asset coverage of Vested Benefits is within the target coverage level of between 100% and 110%.

Accordingly, I recommend that the Institutions continue to contribute to the Fund at the following rates for the Defined Benefit Scheme active members:

Member Contribution Rate (% of Salary)	0%	3%	4%	6%
Institution Contribution Rate (% of Salary)	1%	6%	6%	10%

Over the long term I would expect the Institution contribution rates to reduce towards the long-term contribution rates (refer to Section 6.3).

7
Projections

7.1 Target coverage

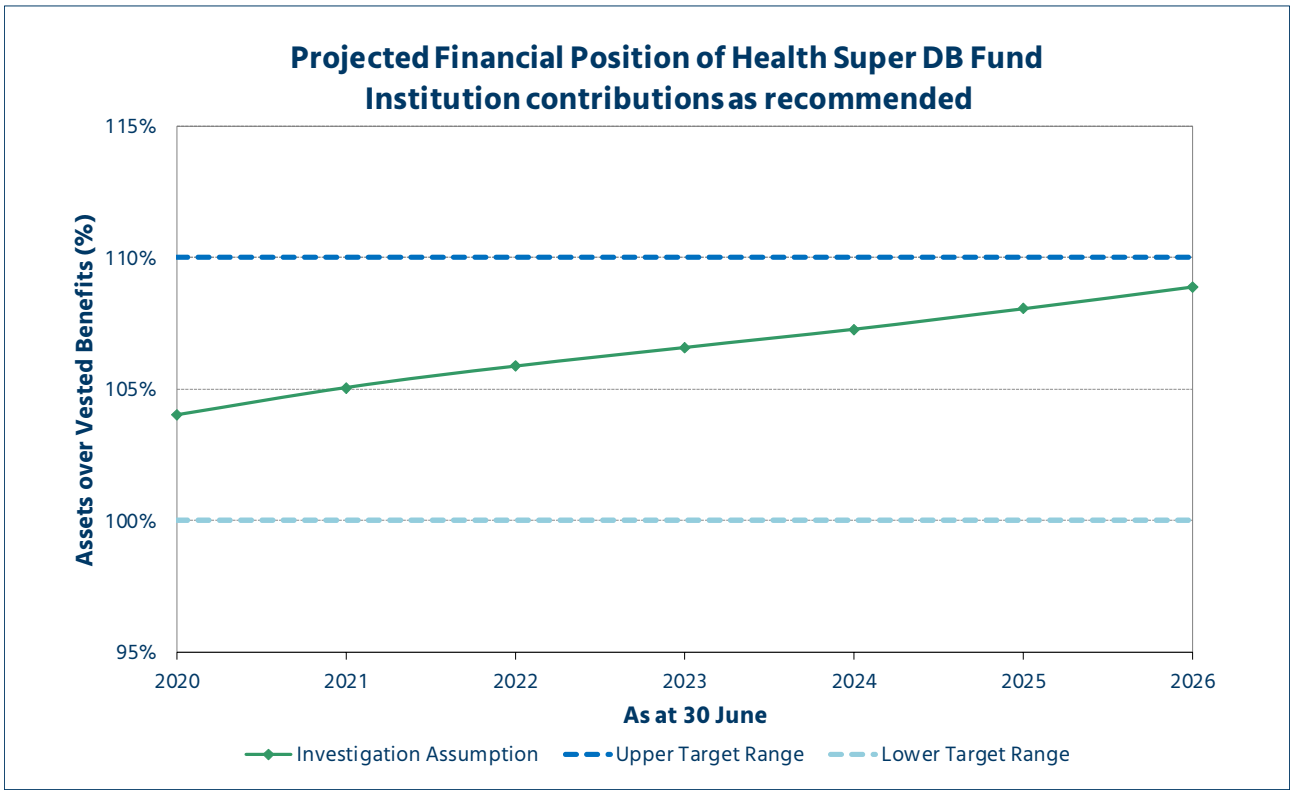
The financing objective of the Fund is to target and maintain assets at between 100% and 110% of the Fund's total Vested Benefits.

7.2 Projected coverage of benefits

I have prepared a projection of the assets and benefit liabilities of the Fund based on:

- The recommended Institution contribution rates set out above in Section 6.5;
- The Fund's current investment strategy;
- The actuarial assumptions adopted for this investigation; and
- Allowing for future member movements into the deferred and lifetime pension sections at rates assumed for this investigation (see Section 4 for details of membership movement assumptions).

The following chart shows that the projected coverage of the Fund's Vested Benefits is expected to remain within the target funding range for several years.



I have also considered a scenario where the Institutional contribution rates are increased by 2% from 1 July 2021 onwards. This would be expected to improve the coverage of the Fund's total Vested Benefits by less than 2% by 30 June 2030. This indicates that the Fund's financial position is not particularly sensitive to changes in the Institution contribution rates, reflecting the declining significance of the Defined Benefit Scheme active membership relative to the assets supporting the Fund.

7.3 Investment volatility

I have considered the impact of investment volatility on the Fund's financial position over the next 10 years using a "high return" and a "low return" scenario. The returns under both scenarios have been derived from assumptions about the likely risk attached to the Fund's defined benefit investment strategy.

Using the investment return model and assumptions adopted, there is approximately a 10% chance of the Fund's cumulative investment return being less than the "low return" scenario over the next 10 years. Similarly, there is approximately only a 10% chance of the Fund's cumulative investment return being greater than the "high return" scenario over the next 10 years.

The cumulative investment return on pension assets to 30 June 2030 under the "low return" and "high return" scenarios are 1.3% and 6.1% per annum respectively (1.1% and 4.9% per annum respectively on non-pension assets).

Based on fluctuations in investment returns only, and assuming other experience is in line with the assumptions adopted for this investigation, there is approximately an 80% chance that the coverage of assets over Vested Benefits at 30 June 2030 will fall in the range from 74% to 140%.

Please note that the "low return" scenario and the "high return" scenario shown above are illustrations only, and show what may occur under assumed future experiences that differ from our baseline assumptions. These scenarios do not constitute upper or lower bounds and the actual future coverage of Vested Benefits may differ significantly from the range shown above, depending on actual future experience.

As such, it will be necessary for the Trustee to monitor coverage levels regularly during the period to the next investigation so that corrective action can be implemented as early as possible in the event this occurs. The Fund's Funding and Solvency Certificate specifies "Notifiable Events" which the Trustee needs to monitor on a regular basis. These are designed to detect any adverse changes in the Fund's financial position.

The Trustee should also be aware that the ability to improve the Fund's financial position by increasing the Institution contribution rates is reducing as the relative size of the Defined Benefit Scheme active membership reduces. Indeed any shortfalls due to adverse experience would be difficult to fund by increasing contribution rates and may require large lump sum contributions. This is illustrated by the present value of future Institution contributions for Defined Benefit Scheme active members on the recommended rates being around 3% of the current Actuarial Value of Accrued Benefits. Thus, in simple terms a 3% shortfall of assets relative to liabilities would require a doubling of the recommended contribution rates to fund.

7.4 Investment liquidity

The expected average term of the Fund's liabilities in respect of the Defined Benefit Scheme active and deferred section members is around 4 years. While a proportion of members are eligible to receive pension benefits, a large proportion will receive lump sum payments. Accordingly, there will be a significant level of benefit outflow, exceeding net contributions. This illustrates a need for the Trustee to ensure that the Fund's investments provide a suitable level of liquidity to meet projected benefit obligations.

8

Fund Details

8.1 Background information

The Fund, as a sub-fund of the First State Superannuation Scheme, is a resident regulated Fund and a complying Fund for the purposes of Superannuation Industry (Supervision) Act 1993 (the SIS Act).

The SIS Act requires that the Fund, as a regulated defined benefit superannuation fund with pensioners, has annual actuarial investigations.

This report has been prepared in accordance with the requirements of the Trust Deed and the SIS Act (and SIS Regulation 9.30). It is provided to the Trustee and participating Institutions and gives the results of the actuarial investigation of the Fund as at 30 June 2020.

Angela Hartl, FIAA, of Mercer, conducted the previous full actuarial investigation for the Fund as at 30 June 2019. The results of that investigation are contained in her report dated 15 August 2019.

This report satisfies the requirements of Professional Standard No. 400 of the Actuaries Institute relating to the investigation of defined benefit superannuation funds. It also meets the requirements of SIS Regulation 9.29A for an annual actuarial investigation.

The advice contained in this report is given in the context of Australian law and practice. No allowance has been made for taxation, accountancy or other requirements in any other country.

8.2 Summary of benefits

A full description of the benefits provided by the Fund is set out in the Fund's Trust Deed, as amended from time to time. A summary of the main benefit provisions in respect of Health Super Defined Benefit Scheme active members is set out below.

Eligibility	Closed to new members since 1 January 1994.				
Members' Contributions (% of salary)	Members can elect to contribute at 0%, 3% or 4% of salary. Members who were contributing 3.5% and 6% of salary at 31 December 1993 may continue to do so.				
Accrual Rate (from 1 July 2004)	Defined benefit accrual rates vary as follows:				
	Member Contribution Rate	0%	3%	4%	6%
	Accrual Rate	0%	3%	4.5%	10%
Average Final Fund Salary (AFFS)	This is the average of a member's aggregate salary earned over the preceding two years of service. A minimum dollar value (equal to the member's salary at 1 January 1994) also applies.				

Normal/Early Retirement Age	65/55
(Accrued) Retirement Benefit	The benefit is a lump sum equal to the member's accrued retirement benefit. This is calculated as a multiple of AFFS. Maximum multiples of 7.2 and 8.0 apply for members of Divisions C and D respectively.
Death Benefit	For a member aged below 60, the death benefit is calculated as the projected accrued retirement benefit at age 60, assuming that: • AFFS remains unchanged • The member's contribution rate for the period between the date of death and age 60 is 4% of salary (or 6% for members currently contributing at that rate). For a member aged over 60, the death benefit is equal to the member's accrued retirement benefit. A minimum dollar death benefit (equal to the member's benefit at 31 December 1993) also applies.
Disability Benefit	For a member aged below 60, the disability benefit is an annual pension equal to 1/12 of the death benefit. Pensions are indexed annually based on changes in CPI. On turning 65, these disability pensioners can elect to cease receiving the disability pension and to receive instead a lump sum benefit. For a member aged over 60, the disability benefit is a lump sum equal to the accrued retirement benefit.
Resignation Benefit	The resignation benefit consists of two components: • Immediate Cash Benefit This is a lump sum equal to the sum of the annual contribution rates paid by a member during their period of membership, multiplied by AFFS. Referred to as "adjusted member contributions". • Deferred Benefit Given all members have more than 5 years' service, a deferred benefit is also payable. This is calculated as the excess of the member's accrued retirement benefit over the member's adjusted member contributions, multiplied by a vesting factor. The vesting factor was 5% for each year of service in excess of 5 years with a maximum of 100%. All members now have in excess of 25 years' service and so have a 100% vesting factor. The deferred benefit may be retained in the Fund and if so becomes payable on retirement after age 55, or upon death or disablement. Deferred benefits are indexed to CPI. However, members may instead choose to transfer their deferred benefit to another section of First State Super or to another superannuation fund. On transfer, the deferred benefit is discounted by 4% p.a. for each year remaining to age 55.

Division D (members who joined prior to 1 July 1988)	Division D members are members of the Old Scheme (i.e. members who joined the Fund prior to 1 July 1988) are entitled to certain guaranteed benefit options. Further details are set out in the Fund's Trust Deed.
Pension Scheme Contributors	Pension Scheme Contributors as defined by the Fund's Trust Deed can elect to receive pension benefits in lieu of lump sum benefits or in combination with lump sum benefits.

8.3 Minimum benefits

All benefits are subject to a minimum Superannuation Guarantee benefit, known as the Minimum Requisite Benefit, which is described in the Fund's Benefit Certificate. The Superannuation Guarantee (Administration) Act 1992 requires Institutions to provide fully vested minimum superannuation benefits to their employees within a complying superannuation fund.

The Defined Benefit Scheme active members receive Institutions' Superannuation Guarantee contributions (currently at 9.5% of salary, legislated to increase to 12% by 2025) to accumulation accounts external to the Fund. Therefore, the prospective SG rate increases are not expected to have an impact on the Fund or increase the cost of providing the defined benefits, assuming there is no benefit design change.

The Minimum Requisite Benefit within the Defined Benefit Scheme for the active members consists of the Adjusted Member Contributions and some pre-1992 benefit components, as defined in the Fund's Benefit Certificate.

8.4 Investment policy

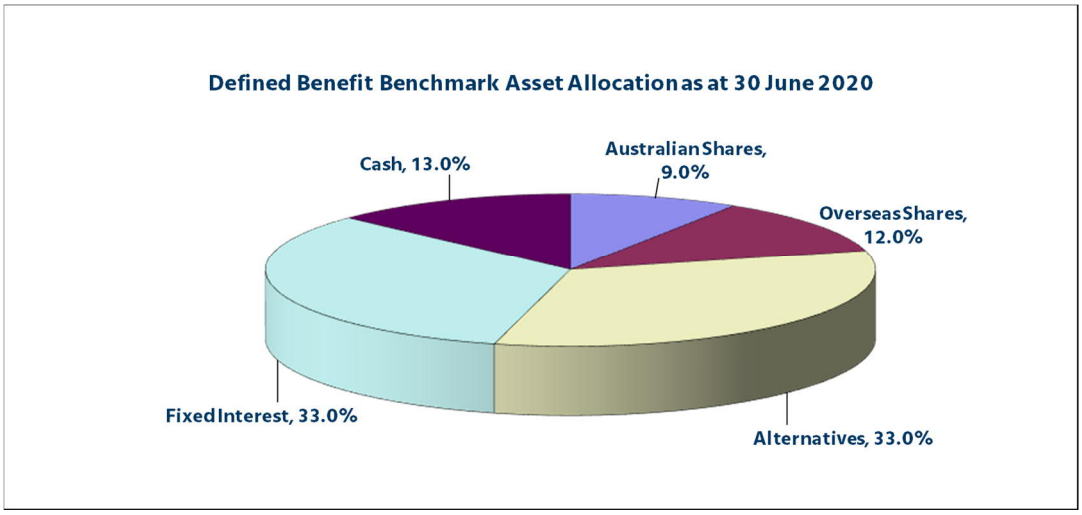
I have reviewed the Fund's investment policy in light of the funding method adopted and the nature of the Fund's liabilities.

The investment objectives for the Defined Benefit section of the Fund are:

1. The primary objective is to maintain a ratio of assets to vested benefit liabilities at a minimum target level of 100% over the long term; and
2. The secondary objectives are to:
    - achieve an asset coverage of 110% of Vested Benefits to adopt an immunisation program that minimises funding risk over the long term;
    - maintain a balance between reducing the long-term cost of the benefits and reducing the volatility of the required Institutions' contribution rate; and
    - generate sufficient liquidity to provide for the cash flow requirements of the DB Division.

The investment mix includes a benchmark exposure of 42% of assets in 'growth' sectors such as shares and most of the alternative assets, with the balance in 'defensive' investments such as cash and bonds. Over the long-term, while 'growth' assets are expected to earn higher returns than 'defensive' assets, these returns are expected to show greater variation from year to year.

The benchmark asset allocations in respect of the Fund assets are as follows:



The expected average term of the Fund's liabilities in respect of the Defined Benefit Scheme active and deferred membership is around 4 years. As a proportion of members are eligible to receive pension benefits and the Fund also pays lifetime pensions, the average term of the Fund's liabilities would be longer than this. As such, the Fund is expected to benefit by investing in 'growth' assets over the long term. However, this is likely to result in the Fund's investment return exhibiting a degree of volatility from year to year, which may impact on the financial position of the Fund and the required level of Institution contributions.

I confirm that the Fund's current investment policy remains appropriate.

8.5 Crediting policy

Accounts used in the calculation of active members' benefits are allocated earnings at the Crediting Rate. The interim Crediting Rate is updated daily based on the change in unit price on the defined benefit investment option. The unit prices allow for tax and investment fees. The interim rate is determined as an annualised financial year to date rate. A final declared Crediting Rate is set using the same methodology as at 30 June each year. Updating the interim rate on a daily basis is appropriate and helps prevent selection against the Fund by members.

Conclusion

A detailed review of the approach for crediting earnings is outside the scope of this investigation. Based on a review of the main features, I consider that the approach adopted is generally suitable taking into consideration the principles of equity between different generations of members and any material risks which may have a significant impact on the Fund (i.e. a market shock or sudden downturn in investment markets).

8.6 Insurance

The insurance arrangements are underwritten by TAL Life Limited ("the insurer") and outlined in a policy dated 1 July 2012.

The purpose of the Fund's insurance policy is to protect against unexpectedly large payouts on the death or disablement of Fund members who are Health Super Defined Benefit Scheme active section members.

The current group life insurance formula for Defined Benefit Scheme active members is designed so that the amount insured is approximately equal to the excess of their death benefit over their accrued retirement benefit. That is:

Sum insured = Death Benefit – Lump Sum Accrued Retirement Benefit

Based on the formula in use at the investigation date, the 'amount at risk' as at 30 June 2020 for the Fund with respect to Defined Benefit Scheme active members was as follows.

	As at 30 June 2020	Death ($M)	Disability ($M)
	Total Benefits	349.4	515.9
less	Sum Insured	44.3	44.3
less	Assets*	405.2	405.2
	Net amount at Risk	**(100.1)**	**66.4**

* Assets supporting Defined Benefit Scheme active members assuming deferred and lifetime pensioner liabilities are fully covered.

On disability Defined Benefit Scheme active section members under the age of 60 receive a lifetime pension with a spouse reversion. On death, only selected active section Defined Benefit Scheme members under the age of 60 are eligible for a spouse pension. The total value of disability benefits is higher than the value of death benefits, because of the higher value placed on pension benefits.

As at 30 June 2020 there was an insurance "shortfall" of $66.4 million on Defined Benefit Scheme active members' total disability benefits. This result assumes that all active members become disabled at the same time. However, in practice the number of members becoming disabled and taking a pension is a very small portion of the Defined Benefit Scheme active membership and the risk of a large number of disablements occurring together is so small that it can be ignored.

I confirm that the current group life insurance formula is appropriate and provides adequate protection for the Fund.

9

Prudential Standards

9.1 Shortfall Limit

Under Prudential Standard SPS 160 The Trustee must determine a "Shortfall Limit", being "the extent to which the Fund can be in an unsatisfactory financial position with the Trustee still being able to reasonably expect that, because of corrections to temporary negative market fluctuations in the value of the fund assets, the fund can be restored to a satisfactory financial position within a year".

I understand that the Fund's Shortfall Limit, determined by the Trustee on the basis of previous actuarial advice, is 98%.

The Shortfall Limit is expressed as a percentage coverage level of defined benefit Vested Benefits by defined benefit assets and it is appropriate to consider the following when determining if the Shortfall Limit remains appropriate:

- The guidance provided in the Actuaries Institute Information Note: Shortfall Limit in Prudential Standard 160;
- The investment strategy for defined benefit assets, particularly the benchmark exposure of 42% to "growth" assets;
- The results of this investigation regarding the extent to which the current and projected defined benefit Vested Benefits are not linked to the investment return on defined benefit assets (i.e. salary-based benefits and defined benefit pensions) and the current and projected relativity between Vested Benefits and Minimum Requisite Benefits.

Based on the above, I recommend maintaining the current Shortfall Limit.

The projections also indicate that the level of Minimum Requisite Benefits is not expected to be a constraint in determining the Shortfall Limit. I will reassess the suitability of the adopted Shortfall Limit as part of the next regular actuarial investigation. The Shortfall Limit should be reviewed earlier if there is a significant change to the investment strategy for defined benefit assets - or if the Trustee otherwise considers it appropriate to do so.

9.2 Statements required by SPS 160

(a) The value of the assets of the Health Super DB Fund ("the Fund"), a sub-fund of the First State Superannuation Scheme, as at 30 June 2020 adopted for the purposes of the actuarial investigation was $1,118.3 million. This value excludes assets held to meet the Operational Risk Financial Requirement. This is also the value of assets used in determining the recommended Institution contribution rates.

(b) In my opinion, the value of the liabilities of the Fund in respect of Accrued Benefits of the Fund as at 30 June 2020 was $1,076.0 million. Hence, I consider that the value of the assets at 30 June 2020 is adequate to meet the value of the Accrued Benefits of the Fund as at 30 June 2020. Taking into account the circumstances of the Fund, the details of the membership and the assets, the benefit structure of the Fund and the industry within which the Fund operates, I consider that the assumptions and valuation methodology used are appropriate in relation to the determination of the Accrued Benefit liabilities for the purposes of this report. Further comments on the assumptions and valuation methodology are set out in Section 4 of this report. Assuming that the Institutions contribute in accordance with my recommendations, then based on the assumptions adopted for this actuarial investigation, I expect that the assets will remain sufficient to cover the value of liabilities in respect of Accrued Benefits during the period up to 30 June 2023.

(c) In my opinion, the value of the liabilities of the Fund in respect of Vested Benefits of the Fund as at 30 June 2020 was $1,075.2 million. Hence, I consider that the value of the assets at 30 June 2020 is adequate to meet the value of the Vested Benefit liabilities of the Fund as at 30 June 2020. Assuming that the Institutions contribute in accordance with my recommendations, then, based on the assumptions made for this actuarial investigation, I expect that assets will remain sufficient to cover the value of Vested Benefit liabilities over the period to 30 June 2023. Hence, I consider that the financial position of the Fund should not be treated as unsatisfactory as defined in SPS 160.

(d) In my opinion, the value of the liabilities of the Fund in respect of the minimum benefits of active Fund members as at 30 June 2020 was $192.4 million. The asset available to support these liabilities was $405.7 million. Hence, the Fund was not technically insolvent at 30 June 2020.

(e) A projection of the likely future financial position of the Fund over the 3-year period following 30 June 2020, based on what I consider to be reasonable expectations for the Fund for the purpose of this projection, is set out in Section 7 of this report.

(f) Based on the results of this investigation, I consider that the Shortfall Limit does not require review. Comments are set out in Section 9.1 of this report

(g) In my opinion, there is a "high degree of probability" as at 30 June 2020 that the Fund will be able to meet the pension payments as required under the Fund's governing rules.

(h) In respect of the three-year period following 30 June 2020, I recommend that the Institutions continue to contribute to the Fund at the following rates for Health Super Defined Benefit Scheme active members:

Member Contribution Rate (% of Salary)	0%	3%	4%	6%
Institution Contribution Rate (% of Salary)	1%	6%	6%	10%

(i) The Fund is used for Superannuation Guarantee purposes:

- All Funding and Solvency Certificates required under Division 9.3 of the SIS Regulations have been issued for the period from the date of the last investigation to 30 June 2020; and
- I expect to be able to certify the solvency of the Fund in any Funding and Solvency Certificate that may be required under the SIS Regulations during the three-year period immediately following this investigation.

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