Heidelberg Australia
Superannuation Fund

Report on the Actuarial Investigation as at 1 July 2019

18 December 2019

Summary

I am pleased to present my report to the Trustee of the Heidelberg Australia Superannuation Fund, Towers Watson Superannuation Pty Ltd (AFSL 236049), on the actuarial investigation into the Heidelberg Australia Superannuation Fund as at 1 July 2019.

This Summary sets out the key results and recommendations contained in this report.

Solvency

The financial position of the Fund has deteriorated over the intervaluation period, as shown in the reduction in the Vested Benefits Index from 120.8% as at 1 July 2016 to 116.6% as at 1 July 2019.

The solvency measures as at 1 July 2016 and 1 July 2019 are also shown below:

Measure	1 July 2016	1 July 2019
VBI	120.8%	116.6%
PVABI	123.7%	116.3%
MRBI	150.7%	141.5%

Funding

The company contribution rate determined under the Attained Age funding method is 10.1% of member salaries as calculated at 1 July 2019.

Taking into account the current surplus and projected financial position of the Fund over the next three years, I recommend the Company contribute at the following rates of member salaries:

From 1 July 2019 to 30 June 2021:

- Nil in respect of Defined Benefit Members;
- Nil in respect of Accumulation Members.

From 1 July 2021:

- Nil in respect of Defined Benefit Members;
- Prevailing SG rate of Ordinary Time Earnings (OTE) in respect of Accumulation members.

WillisTowersWatson

Contents

Throughout this report the following terms are used:

Fund
Heidelberg Australia Superannuation Fund

Trustee
Towers Watson Superannuation Pty Ltd (AFSL 236049)

Company
Heidelberg Graphic Equipment Limited

Trust Deed or Rules
The Fund's Trust Deed prepared in October 2004 and last updated on 21 September 2016.

The Investigation Date or Valuation Date
1 July 2019

From 1 January 2022:

- 10% p.a. of salaries of Defined Benefit Members' salaries plus $370,000 p.a.;
- Prevailing SG rate of OTE in respect of Accumulation members.

In addition, the Company should make contributions at a rate of 4.71% of salary in respect of applicable Defined Benefit members paying their member contributions by salary sacrifice and the amount of any additional voluntary contributions made by members to the Fund by way of salary sacrifice.

Other Matters involving Actuarial Oversight

I further recommend that:

- the Trustee retain the shortfall limit at 97% based on the current investment structure of the Fund;
- the Trustee continue to monitor the financial position of the Fund quarterly throughout the following investigation period;
- current external insurance arrangements for death and disablement benefits be retained until 30 June 2020 at which time they will be reviewed with the expectation that the formula to determine the insured component for defined benefit members will change.

In line with requirements under legislation and Trust Deed, the next actuarial investigation of the Fund should be conducted with an effective date no later than 1 July 2022. The recommended company contribution rates will be reviewed at that time or at an earlier date if considered appropriate as a consequence of the regular review of the VBI or as required by legislation.

I am not aware of any event since 1 July 2019 that warrants review of the recommendations in this report.

Tracy Polldore
Fellow of the Institute of Actuaries of Australia

18 December 2019

ABN 45 002 415 349 AFSL 229921

Level 4, 555 Bourke Street, Melbourne VIC 3000

DO: ST | TR: FB | ER/CR: TP

Introduction

Scope

This investigation has been prepared effective 1 July 2019 for Towers Watson Superannuation Pty Ltd (AFSL 236049), the Trustee of the Fund, by the actuary to the Fund, Tracy Polldore, FIAA.

Current legislation and the Trust Deed require an actuarial investigation and report to be prepared at least every three years for defined benefit funds. The main aims of the investigation are to examine the current financial position of the Fund and the long-term funding of the Fund's benefits, and to provide advice to the Trustee on the contribution rate at which the Company should contribute and on any other matters the actuary considers relevant.

This investigation is primarily interested in the defined benefit liabilities of the Fund, and unless otherwise specified, this report relates only to such defined benefit liabilities. The Accumulation liabilities of the Fund, including those that relate to defined benefit members, are fully funded and do not impact upon the Defined Benefit liabilities. No investigation is required regarding the Accumulation liabilities, although in my recommendations I have continued to recommend that the Company continue to meet any Superannuation Guarantee, contractual or any other obligations in respect of such liabilities from the surplus within the Fund's Defined Benefit section until 30 June 2021.

This actuarial review has been conducted in order to meet the Trustee's obligations in accordance with Prudential Standard SPS 160 (SPS160) issued under section 34C of the Superannuation Industry (Supervision) Act (SIS Act).

This report has been prepared in accordance with Professional Standard 400, dated June 2017, issued by the Institute of Actuaries of Australia.

Previous Actuarial Investigation

The previous actuarial investigation of the Fund was carried out by Tracy Polldore, FIAA as at 1 July 2016, with the results of that investigation set out in a report dated 20 December 2016.

The report concluded that the Fund was not in an unsatisfactory financial position (as defined by SIS legislation) at that date, and recommended that the Company make nil contributions to the Fund in respect of Defined Benefit Members.

Subsequent to the previous actuarial investigation it was recommended that the Company cease contributions in respect of accumulation members from 1 May 2017.

We understand that the Company has followed the recommendations above and also the further recommendations to make contributions at a rate of 4.71% of salary in respect of applicable Defined Benefit members paying their member contributions by salary sacrifice and the amount of any additional voluntary contributions made by members to the Fund by way of salary sacrifice.

Experience since 1 July 2019

Since 1 July 2019 the experience of the Fund has been as follows:

- The net return on the Fund's assets from the valuation date to 30 September 2019 was approximately 2.1%; and

- Not materially more or less number of members than expected have exited the Fund.

While we don't expect the actual experience since 1 July 2019 to have had a material impact on the Fund, we have nonetheless made allowance for the known experience when carrying out the projection of the financial position of the Fund from 1 July 2019.

Limitations

This report is provided subject to the terms set out herein and in our engagement letter dated 28 November 2014 and the accompanying Terms and Conditions of Engagement. This report is provided solely for the Trustee's use and for the specific purposes indicated above. It may not be suitable for use in any other context or for any other purpose.

I confirm that I have not been subject to any other restrictions or limitations in the preparation of this report.

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.

We consent to the Trustee making a copy of this report available on the Plan's website where required in accordance with the relevant legislation.

The Trustee may make a copy of this report available to its auditors, the Company and to any person to whom the Trustee may be required to provide a copy under relevant legislation, but we make no representation as to the suitability of this report for any purpose other than that for which it was originally provided and accept no responsibility or liability to the Trustee's auditors the Company or any third party in this regard. The Trustee should draw the provisions of this paragraph to the attention of its auditors and the Company 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 Trustee and other persons or organisations designated by the Trustee. We have relied on all the data and information provided, including Fund 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 the "Additional Information" section of this report.

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.

When assessing the adequacy of the assets and future contribution rates, both the long-term and short-term solvency positions should be considered. To assess the solvency position, I have considered the following funding solvency measures:

Solvency

- Vested Benefits Index (VBI), the ratio of assets to the vested benefits, which represent the total amount which the Fund would be required to pay if all members were to voluntarily leave service on the investigation date;
- The Present Value of Accrued Benefits Index (PVABI), the ratio of assets to the present value of accrued benefits, which represents the value in today's dollars, of expected future benefits payable based on membership completed to the valuation date,[1] and
- The MRBI, the ratio of assets to the portion of the Minimum Requisite Benefits as defined in the Fund's Benefit Certificate that relates to defined benefits.[2]

The following table shows the above indices as at the valuation date, as well as the prior valuation date.

	As at 1 July 2019			As at 1 July 2016		
Measure	Value of Liability	Value of Assets	Index	Value of Liability	Value of Assets	Index
VBI	$13,070,000	$15,242,000	116.6%	$12,639,000	$15,264,000	120.8%
PVABI	$13,104,000	$15,242,000	116.3%	$12,342,000	$15,264,000	123.7%
MRBI	$10,769,000	$15,242,000	141.5%	$10,128,000	$15,264,000	150.7%

Overall, the indices have reduced from those at the previous investigation date. This is primarily a result of the Company not making contributions to the Fund over the valuation period.

In addition, the PVABI has decreased due to the change in the valuation assumptions used for projecting member benefits. The lower gap between the expected level of future investment returns and salary increase has increased the level of the present value of accrued benefits, which in isolation, resulted in a deterioration of the PVABI.

The VBI is above 100% as at the valuation date, and as such, the Fund is to be treated as being in a satisfactory financial position as at that date.

Retrenchment Benefits, Discretionary Benefits and Contingent Benefits

On retrenchment, Defined Benefit members are entitled to a benefit equivalent to the vested benefit. As outlined above, assets exceeded these benefits at 1 July 2019.

The Fund has not historically paid any material discretionary benefits so we have not analysed the impact such discretionary benefits. There are no other material contingent benefits offered by the Fund.

Termination Benefits

Upon termination of the Fund, the Trust Deed provides for a benefit to be paid to the member equal to the "Member's Equitable Share" of the assets. As a result, the benefits payable on termination of the Fund do not impose any additional constraints on funding and we therefore confirm that, in our opinion, the assets were sufficient to provide the required benefits if the Fund was terminated on 1 July 2019.

[1] Benefits have been apportioned to past service by proportioning the projected benefit payable by the proportion of total projected service that is completed to the valuation date.
[2] The minimum benefits are as advised by the Plan's administrator.

Funding

This section considers the long-term funding of the Fund and assesses the contributions required in order to fund benefits payable in future years. To determine the long-term contribution rates, we have used the Attained Age funding method as described in the "Additional Information" section of this report.

Long Term Funding results

The long-term Company contribution rate is calculated in the table below.

Calculation of Company Contribution Rate	$'000
Future Service Liability	2,265
Less Present Value of Member Contributions	(720)
Liability to be funded by Employer Contributions	1,545
Present Value of 1% of Salaries	180
Liability to be funded as a % of salaries	8.6%
Long-term company contribution rate, after allowing for tax (before expenses)	10.1%
Fair Value of Assets	15,242
Less Present Value of Accrued Benefits	13,104
Equals Surplus/(Deficit)	2,138

The change in the equivalent long-term Company contribution rate calculated as at 1 July 2019 from the rate calculated as at the 1 July 2016 (of 8.3% of member salaries) is mostly attributed to the change of financial assumptions adopted for the current investigation.

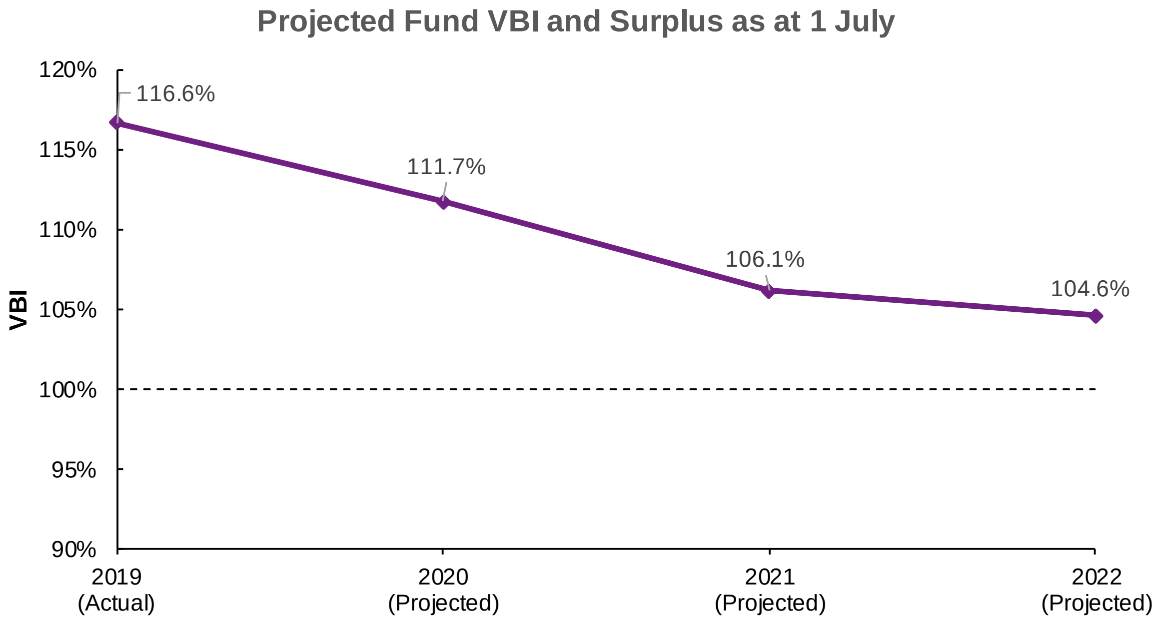
Given the surplus within the Fund, the company contribution rate required to fund defined benefit members in the short term remains nil. The level of surplus is also expected to be sufficient for the Company contributions in respect of accumulation members to continue to be met from the defined benefit section in the short term.

The Company has a Funding Policy dated 19 May 2011 that states that the Allowable Range of the VBI is 100% to 110% and that if the VBI increases beyond this range the Company may choose to reduce or cease contributions in respect of Defined Benefit members until the VBI returns to the mid-point of the Allowable Range (105%) as determined and advised by the Actuary.

We recommend that contributions can remain nil until 30 June 2021 in respect of Accumulation members and until 31 December 2021 in respect of Defined Benefit members. From 1 January 2022, Defined Benefit contributions are required at the long term contribution rate.

In order to assess whether the current contribution program is likely to meet this target, we have projected the Fund's Vested Benefits Index over the next three years. This projection allows for expected Fund expenses of $370,000 p.a.

As can be seen from the graph, on the basis of the selected actuarial assumptions, the contribution program is sufficient to maintain the VBI above 100% over the next three years, with the VBI projected to be around 105% at the effective date of the next actuarial review.



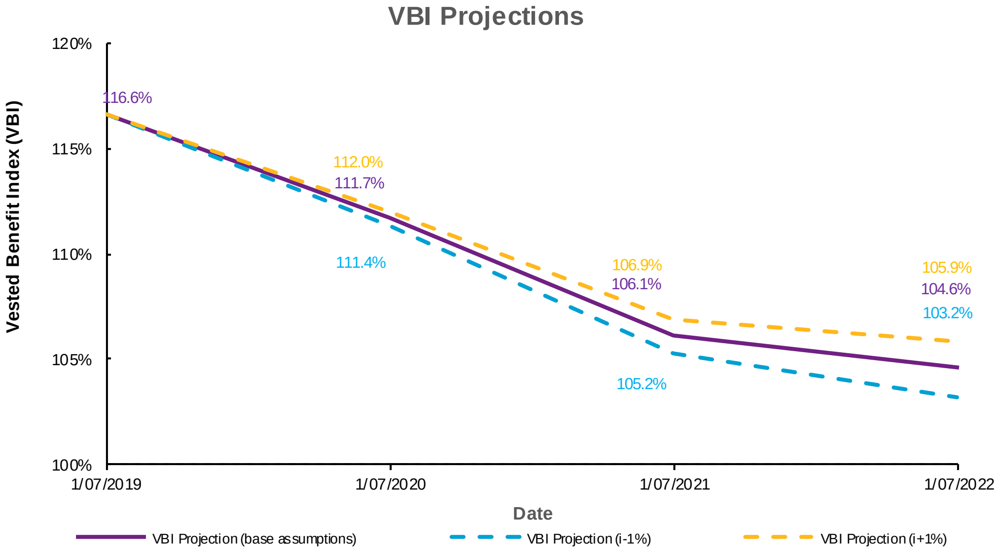
Sensitivity Analysis

Before making a recommendation on the level of contributions that the Company should make to the Fund, it is useful to consider the sensitivity of the analysis above to reasonable variations in the valuation assumptions. The following table shows the long-term contribution rate calculated, if key assumptions had been varied as described below:

	This Valuation Basis	Investment Return Sensitivity +1%	Investment Return Sensitivity -1%
Discount Rate	4.0%	5.0%	3.0%
Expected Salary Growth	3.0%	3.0%	3.0%
Present Value of Accrued Benefits Index	116.3%	117.8%	114.1%
Long Term Contribution Rate (before any adjustment for surplus or deficit)	10.1%	9.2%	11.2%

The above results show that the Fund's financial position (on an Accrued Benefits basis) and the long term Company contribution rate are sensitive to long-term actuarial assumptions.

Similarly, the Fund's projected VBI over the next three years under the varied assumptions and the contribution program is shown in the graph below:



These results show that under the sensitivities considered, the Fund is expected to remain in a satisfactory financial position over the next three years if the Company continues contributions in line with the recommended contribution program.

While the sensitivities have been selected to be illustrative of reasonable changes in the valuation assumptions, they do not represent the upper or lower bounds of possible outcomes and more extreme outcomes are possible.

Summary

On the basis of the above results, and having regard to the Company's preferences as well as the Funding Policy, we believe that the following Company contribution program is sufficient to meet the funding requirements of the Fund.

From 1 July 2019 to 30 June 2021:

- Nil in respect of Defined Benefit Members;
- Nil in respect of Accumulation Members.

From 1 July 2021 to 31 December 2021:

- Nil in respect of Defined Benefit Members;
- Prevailing SG rate of Ordinary Time Earnings (OTE) in respect of Accumulation members.

From 1 January 2022:

- 10% p.a. of salaries of Defined Benefit Members' salaries plus $370,000 p.a.;
- Prevailing SG rate of OTE in respect of Accumulation members.

In addition, the Company should make contributions at a rate of 4.71% of salary in respect of applicable Defined Benefit members paying their member contributions by salary sacrifice and the amount of any additional voluntary contributions made by members to the Fund by way of salary sacrifice.

We further recommend that the VBI position (and other measures of solvency) continue to be monitored quarterly throughout the following investigation period, to ensure that these contribution recommendations remain appropriate.

Other Matters
Involving Actuarial Oversight

Investments

Investment Strategy

The Trustee has developed formal objectives and a policy for the investment of the Fund's assets. These objectives and policies are summarised in the Fund's "Investment Governance Framework" dated 11 December 2018.

To meet this objective, the investment policy is to have the assets supporting the Fund's defined benefit liabilities invested 72% in growth assets such as shares and property.

The actual and target asset allocation as 1 July 2019 of such assets is shown in the below table:

Asset Class	Target Asset Allocation as at 1 July 2019	Actual Asset Allocation as at 1 July 2019
Australian Equities	32.0%	32.4%
International Equities	32.0%	32.5%
Property	8.0%	8.1%
Alternative Assets	-	-
Total Growth Assets	**72.0%**	**73.0%**
Australian Fixed Interest	10.0%	10.0%
International Fixed Interest	10.0%	10.2%
Cash	8.0%	6.8%
Total Defensive Assets	**28.0%**	**27.0%**

In my opinion an investment strategy as described above is suitable for a fund of this type having regard to its financial position, the underlying liabilities and the capacity of the respective employers to meet any funding shortfall.

Crediting Rate and Investment Reserving Policy

The Fund's policy credits defined benefit member accounts with actual investment returns (net of fees and taxes) from the underlying assets. In our view, this remains appropriate.

Liquidity

Taking into account the ready sale of the Fund's assets from time to time, in our opinion the Fund has sufficient liquidity to meet payments from regular cashflows.

Shortfall Limit

The Trustee currently has an approved shortfall limit of 97%.

Based on the Fund's benefit design and its target asset allocation described above, in our opinion the 97% shortfall limit remains reasonable for the Fund.

Insurance

Death and Disablement Benefits

At the investigation date, the Fund had insurance with AMP in respect of death and total and permanent disablement benefits.

The following formula is used to determine the level of insurance required in respect of Defined Benefit members:

Sum Insured = Death Benefit – maximum of 110% x (Accrued Benefit, Vested Benefit)

where

Accrued Benefit = Accrued Benefit Multiple x Prospective Final Average Salary

Vested Benefit = Benefit member receive if they voluntary leave Heidelberg

As at the valuation date, the amounts over/(under) insured in the Fund are shown in the table below:

	$'000s
Lump Sum Death and Disablement Benefits (A)	15,893
Less Aggregate Life Insurance (B)	2,740
Fund's Exposure (A-B)	13,153
Less Fair Value of Assets	15,242
Shortfall/(Excess) in Insurance	(2,089)

The Assets as at 1 July 2019 are more than sufficient to meet the Fund's Exposure. There remains an excess of insurance which will reduce as the coverage of vested and accrued benefits decreases.

On this basis, we consider the current insurance arrangements adequate in the short term. We recommend that the current insurance formula be reviewed following the 1 July 2020 annual review with the expectation that the formula will change as the VBI reduces.

Additional Information

Risks

The table below summarises the main risks to the financial position of the Fund.

Risk	Approach taken to risk
Investment returns on the existing assets could be insufficient to meet the Trustee's funding objectives	The Trustee takes advice from the Fund Actuary on possible assumptions for future investment returns. In setting the future contributions, the Fund Actuary considers the effect on the future financial position if investment returns are less than expected. The Trustee is able to agree further contributions with the Company at subsequent valuations if future returns prove insufficient.
Salary increases could be different from that assumed which could result in higher liabilities	Salary increases are generally linked to price inflation. The Trustee invests in assets that are expected to be correlated to future inflation in the longer term (sometimes referred to as "real" assets). This means that, over the longer term, such assets are expected to keep pace with inflation. Such assets include equities, property and index-linked bonds.
Falls in asset values might not be matched by similar falls in the value of the Fund's liabilities	The Trustee considers this risk when determining the Fund's investment strategy. It consults with the Company in order to understand the Company's appetite for bearing this risk and takes advice on the Company's ability to make good any shortfall that may arise. To the extent that such falls in asset values result in deficits at future valuations, the Company would be required to agree a recovery plan with the Trustee to restore full funding over a period of time.
Fund members remain employed longer than assumed	The Trustee adopted withdrawal assumptions that it regards as prudent estimates of the future working lifetime of members. To the extent members continue to accrue benefits within the Plan for longer than expected this could cause the Plan's actual projected VBI to be lower than expected.
Legislative changes could lead to increases in the Fund's liabilities	The Trustee takes legal and actuarial advice on changes in legislation and consults with the Company, where relevant.

Economic risk | Demographic risk | Legal risk

Benefits summary

The Fund's operations are governed by a Trust Deed which was prepared in October 2004 and most recently amended on 21 September 2016. The Fund is closed to new defined benefit members.

The Fund is a regulated complying superannuation fund under the Superannuation Industry (Supervision) Act and qualifies for concessional tax treatment.

This summary contains the main features only. Reference should be made to the full Trust Deed for further detail.

Classes of Membership

Defined Benefit Categories:

DB and DBP

Accumulation Categories:

ACC – Standard Accumulation members

ACL – Category ACC Late Retirees

DBL – Defined Benefit members who have exceeded age 65 and are currently accruing accumulation benefits; for the purpose of this review, these members are treated as accumulation members.

F – Frozen members

S – Spouse members

RBD – Retained Benefits Division

Member Contributions

Members are required to contribute to the Fund at the following rates:

Category	Member Contribution Rate (% of salaries)
DB, DBP	4%*
DBL	Nil
ACC, ACL	Nil
F, S, RBD	Nil

* Members may pay 4% contributions from after-tax salary or 4.71% contributions from before-tax salary.

Company Contributions

In respect of the Defined Benefit members in Categories DB and DBP, the Company contributes, on the advice of the Actuary, at a rate sufficient to meet the balance of the cost of the benefits. In respect of the accumulation categories ACC and ACL, the Company contributes at the applying SG rate of OTE and in respect of accumulation categories F, S the Company does not contribute because the members are frozen or spouse members.

Final Average Salary

The Final Average Salary used for the determination of Defined Benefit Members' benefits is the greater of the average of the member's salaries at three consecutive annual review dates (1 July) over the ten years preceding retirement and the average salary earned over the previous three years.

Defined Benefits

Normal Retirement Age

The Normal Retirement Age is 65.

Early Retirement Age

Retirement can occur at any time after attaining age 55 or at any time due to ill-health.

Normal Retirement Benefit

On retirement each member is entitled to a lump sum benefit equal to a multiple of the member's Final Average Salary.

The multiple is calculated as follows:

Former Category A and A1 members

- 15% for each year of membership of the Fund.

Former Category B members

- 12% for each year of membership of the Fund prior to 1 April 1997; plus
- 15% for each year of membership of the Fund after 1 April 1997.

Former Category C members

- 7.5% for each year of membership of the Fund prior to 1 April 1997; plus
- 15% for each year of membership of the Fund after 1 April 1997.

where periods of membership are measured in years and complete months.

Late Retirement Benefit

On retirement after age 65, a lump sum benefit is payable equal to the lump sum retirement benefit at age 65, plus SG contributions (net of allowance for tax and expenses) accumulated with investment returns to the date of retirement.

Early Retirement Benefit

On retirement before age 65, a lump sum benefit is payable which is a pro rata proportion of the Member's Normal Retirement Benefit using the ratio of actual service to total service, i.e. it is calculated as the Normal Retirement Benefit multiplied by actual service divided by total service to the Normal Retirement Age.

Death Benefit

On the death of a member prior to age 65 a lump sum benefit is payable equal to the benefit that would have been payable at the Normal Retirement Date, but assuming the member's salary remained unaltered from the date of death until age 65, and assuming the member remained in the same membership category from the date of death until age 65. For Members who joined the Fund before 1 April 1997, this is subject to a minimum of four times salary up to age 61, reducing to one times salary at age 65.

Total and Permanent Disablement (TPD) Benefit

If a member becomes Totally and Permanently Disabled, a lump sum benefit is payable equal to the benefit that would have been paid if the member had died on the date they became Totally and Permanently Disabled.

Leaving Service Benefit

If a member leaves the service of the Company and no other benefit is payable, a lump sum benefit is payable equal to the member's accrued benefit multiple times FAS times 60% plus 2% for each completed year of membership to a maximum of 1.00 after 20 years membership. This factor increases linearly to 1.00 between age 50 and 55.

For contributory members at 31 March 1997, the benefit is subject to a minimum of member contributions with interest, increased by 30% plus 6% for each year of membership in excess of 5 years, subject to a maximum increase of 150% after 25 years membership.

Additional Accounts

Any additional contributions and amounts transferred in from other funds are accumulated with investment earnings and paid on leaving the Fund for any reason.

Superannuation Guarantee (SG)

From 1 July 1992, the Federal Government introduced legislation relating to superannuation. In particular, minimum levels of employer contributions were set in the Superannuation Guarantee (Administration) Act. As a result, the benefits payable, after allowing for any amounts contributed by the Company to any other superannuation Fund, are subject to a minimum benefit specified by the Company and advised to the Trustee having regard to the Fund's actuarial Benefit Certificate.

Surcharge

From 20 August 1996, the Federal Government introduced a surcharge on employer superannuation contributions of higher income members. The surcharge was abolished from 1 July 2005 but some assessments relating to periods before 2005 were received by the Fund after this date. Relevant members' benefits are reduced as necessary in order to meet the cost of the surcharge.

Changes to the benefits

Since the valuation as at 1 July 2019 no changes have been made to the Fund's benefits.

Summary of Data Used in this Investigation

Membership Data

Australian Administration Services Pty Limited (AAS) has responsibility for maintaining member records, payment of benefits and other administrative tasks of the Fund.

Australian Administration Services Pty Limited (AAS) provided data in respect of members of the Fund as at 1 July 2019, including members who had left the Fund since the last investigation date.

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

The following table shows a summary of the membership as at 1 July 2016 and 1 July 2019:

	1 July 2016	1 July 2019
Number of Members	37	27
Average Age	53.2	54.2
Average Past Membership	25.2	26.7
Average Superannuation Salary	97,800	114,900

Assets Data

AAS provided audited accounts for the Fund as at 30 June 2019. The fair value of assets as disclosed, less any amount held to meet the Operational Risk Financial Requirement, was $25,245,000. Because this investigation is focused on the defined benefits, we have deducted an amount of $10,003,000 from this value in respect of accumulation liabilities to calculate the value of assets that are used to support defined benefits. The resultant value of $15,242,000 was used in this valuation to determine contribution recommendations and Funding Status Measures.

The accounts were audited by Crowe on 24 September 2019.

We are satisfied that there are no material data discrepancies and that the data provided is suitable for the purpose of this investigation. We have relied on the information provided for the purposes of this investigation. Although we have no reason to doubt the quality of asset information provided, the results of this investigation are dependent on the quality of the asset information. Any changes to the asset values above will have an impact on the outcome of the investigation and any resulting recommendations.

Funding Method, Assumptions and Experience

Funding Method

In this valuation, I have used the Attained Age method. Under this method, the company contributions is calculated as the cost of benefits accruing to members in respect of all future membership plus other relevant costs (such as administration expenses), with an adjustment to allow for the amortisation of surplus or deficit existing in the Fund in respect of benefits accrued at the valuation date. These contributions are expressed as a percentage of salaries, by comparing the amount against the expected present value of 1% of members' salaries.

This funding method is suitable for this valuation as it allows the surplus (or deficit) of the Fund to be used (or made up) by the Company over a shorter time period.

In producing my recommendations, I have also taken into account the pace of funding required to maintain certain short term solvency measures, in particular, that legislation requires the VBI to be above 100% and that the Trustee has a funding range between 100% and 110%.

In the previous actuarial investigation, the Attained Age Method was used to determine the level of contributions. In my view this method remains appropriate.

Assumptions

In order to determine the value of expected future benefits and Fund assets, it is necessary to make assumptions regarding the timing and amount of future benefit payments, expenses and contributions. In doing so it is important to examine the experience of the Fund since the last valuation to see whether the previous assumptions have been borne out in practice.

While each of the assumptions used is normally the actuary’s best estimate of future experience, in practice, the actual experience in any (short) period can always be expected to differ from the assumptions to some extent. However, it is intended that over longer periods, they will provide a reasonable estimate of the likely future experience and financial position of the Fund.

In the short-term, as the actual experience emerges differently to the experience implied by the assumptions, the financial position of the Fund will also vary from that expected. However, adjustments to company contribution rates, if any, can be made to reflect these differences in the following actuarial investigation.

Financial Assumptions

Valuation assumptions can be broadly divided into demographic assumptions, which relate to characteristics of current and future members of the Fund, and financial assumptions, which are assumptions other than demographic assumptions. The following sections first consider the financial assumptions that are to be adopted for this valuation.

Investment Returns

The rate of return on the Fund's Assets (net of tax and investment expenses that are deducted from the investment return) from 1 July 2016 to 1 July 2019 are set out in the table below:

Year Ending	Net Investment Return
1 July 2017	12.2%
1 July 2018	8.8%
1 July 2019	8.4%
Overall	9.8% p.a.

Over the three-year period to 1 July 2019 the assets held in the Fund returned 9.8% p.a. which is higher than rate assumed in the previous investigation of 4.5% p.a. (net of tax). In isolation, this has had a positive impact on the financial position of the Fund.

While short-term differences between actual investment return experience and the actuarial assumption can affect the long term financial position of the Fund as measured by the actuarial investigation, the assumption used in the investigation must be based on long-term expectations since the investigation involves valuing payments in the future.

Based on models of future investment returns developed by Willis Towers Watson, the current long term expectations of investment returns net of taxation and investment management expenses and current strategic asset allocation of the Fund is 4% p.a. On this basis, I have assumed a long-term investment earning rate of 4% p.a. for this investigation, which is lower than the assumed long term earning rate used for the previous investigation was 4.5% p.a.

Salary Increases

The average salary increases during the investigation period for the members remaining in the Fund as at 1 July 2019 was 3.1% p.a. This is largely in line with the salary increases assumption adopted for the previous actuarial investigation of 3.0% p.a. This is not expected to have had a material impact on the financial position of the Fund.

The Company has confirmed that it expects long-term salary increases for the remaining members to average 3% p.a., which is consistent with a real wage growth of 1% p.a. above the current long term expectations of price increases of 2% p.a. based on modelling by Willis Towers Watson. I have therefore adopted this rate for the purpose of this investigation.

Administration Expenses and Insurance Costs

For this investigation, I have assumed:

- an allowance of $355,000 p.a. has been made for administration expenses in respect of both accumulation and Defined Benefit Members, in line with the Fund's experience and expected expenses going forward. This is an increase from the $314,000 p.a. allowed for in the previous investigation;
- an allowance of $15,000 p.a. has been made for insurance premiums for accumulation members, as these are not deducted from members' accounts and there is no provision made in the contribution rate for accumulation members. Provision has also been made for the insurance premiums associated with Defined Benefit members' death and disability benefits. This is a decrease from the $26,000 p.a. allowed for in the previous investigation;

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

Taxes

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

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

Demographic Assumptions

Rates at which Employee Members Cease Service

The number of members exiting the defined benefit section during the review period was generally in line with expectations.

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.

Examples of rates at which members leave the Fund per year per 10,000 members:

Age	Resignation	Death	Total and Permanent Disablement
25	1,000	4	1
30	710	4	1
35	460	6	2
40	380	9	4
45	290	14	8
50	170	24	18
55	0	40	39
60	0	68	83

Rates of Early Retirement

The number of members reaching a given age who are expected to retire are as follows:

Age	Number per year per 10,000 members
55	2,000
56	500
57	500
58	500
59	500
60	2,000
61	1,500
62	1,500
63	2,000
64	5,000
65	10,000

Statutory Statements Under SPS 160

Heidelberg Australia Superannuation Fund

Actuarial Investigation as at 1 July 2019

The statements required under paragraphs 23(a) to (i) of SPS 160 for interim and regular investigations are set out below:

Fund Assets

At 1 July 2019 the net market value of assets of the Fund, excluding any amount held to meet the Operational Risk Financial Requirement (ORFR), was $15,242,000.

Projection of Defined Benefit Vested Benefit Index

Based on the actuarial assumptions I project that the likely future financial position of the Fund over the three years following the investigation date will be as follows:

Date	Defined Benefit Vested Benefits Index
1 July 2019	116.6%
1 July 2020	111.7%
1 July 2021	106.1%
1 July 2022	104.6%

Accrued Benefits

The value of the accrued liabilities of all members as at 1 July 2019 was $13,104,000.

In my opinion, the value of the assets of the Fund at 1 July 2019 was adequate to meet the liabilities in respect of accrued benefits in the Fund (measured as the present value of members' accrued entitlements using the actuarial assumptions).

This assessment has been made using assumptions and a valuation method which I regard as reasonable.

Vested Benefits

The value of the vested benefits of all members as at 1 July 2019 was $13,070,000.

In my opinion, the financial position of the Fund is not unsatisfactory and the shortfall limit does not need to be reviewed at this time.

Minimum benefits

The value of the liabilities in respect of the minimum benefits of members as at 1 July 2019 was $10,769,000 which is less than the value of assets held at that date.

Funding and Solvency Certificates

Funding and Solvency Certificates for the Fund covering the period from 1 July 2016 to 1 July 2019 required by the Superannuation Industry (Supervision) Act have been provided. In my opinion, I am likely to be able to provide Funding and Solvency Certificates for the Fund covering the period from 1 July 2019 to 1 July 2022.

Company Contributions

The report on the actuarial investigation of the Fund at 1 July 2019 recommends the Company contribute at the following rates:

From 1 July 2019 to 30 June 2021:

- Nil in respect of Defined Benefit Members;
- Nil in respect of Accumulation Members.

From 1 July 2021:

- Nil in respect of Defined Benefit Members;
- Prevailing SG rate of Ordinary Time Earnings (OTE) in respect of Accumulation members.

From 1 January 2022:

- 10% p.a. of salaries of Defined Benefit Members' salaries plus $370,000 p.a.;
- Prevailing SG rate of OTE in respect of Accumulation members.

In addition, the Company should make contributions at a rate of 4.71% of salary in respect of applicable Defined Benefit members paying their member contributions by salary sacrifice and the amount of any additional voluntary contributions made by members to the Fund by way of salary sacrifice.

Pre-July 1998 Funding Credit

No pre-July 1998 funding credits have been granted to the Fund.

Tracy Polldore
Fellow of the Institute of Actuaries of Australia

18 December 2019

ABN 45 002 415 349 AFSL 229921

Level 4, 555 Bourke Street, Melbourne VIC 3000