

Actuarial Review of The Quadrant Superannuation Scheme Defined Benefit Funds

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1. Executive Summary

We have carried out an investigation into the Quadrant Superannuation Scheme ('the Scheme') using the member data and other information provided as at 30 June 2014 and set out the results of the review in this report.

1.1 Financial Position as at 30 June 2014

In Table 1 we have compared the vested benefits of the Scheme with the estimated net assets, as at 30 June 2014.

Table 1. Vested Benefits

Section of the Scheme	Vested Benefits (\$m)	Net Assets (\$m)	Surplus/ (Deficit) (\$m)	Vested Benefits Index
Quadrant Defined Benefits ^{<}	\$57.47	\$66.31	\$8.84	115.4%
Quadrant Accelerated Benefits	\$19.37	\$19.37	\$0.00	100.0%
HCC Defined Benefits [#]	\$46.29	\$49.70	\$3.41	107.4%
RACT Defined Benefits	\$1.02	\$1.19	\$0.17	117.0%
LCC Defined Benefits [*]	\$61.18 [^]	\$61.69	\$0.51	100.8%
Investment Choice	\$581.96	\$581.96	\$0.00	100.0%
Total (before reserves)	\$767.29	\$780.22	\$12.93	101.7%
Total Reserves		\$5.79	\$5.79	
Total (including reserves)	\$767.29	\$786.01	\$18.72	102.4%

[^] Assumes Early Retirement Benefits are paid to those over age 55

[#] Includes members who are employees of both HCC and Southern Water (part of TasWater from 1 July 2013).

^{*} Includes members who are employees of LCC, Ben Lomond Water and Onstream (parts of TasWater from 1 July 2013).

[<] The Quadrant Defined Benefits' assets include an amount of \$2.03 m which will be subject to future attribution analysis

As shown in Table 1, the Scheme as a whole remained in a satisfactory financial position as at 30 June 2014, i.e. net assets exceeded the value placed on vested benefits. In addition, all four of the Scheme's defined benefit sub-funds were in a satisfactory position.

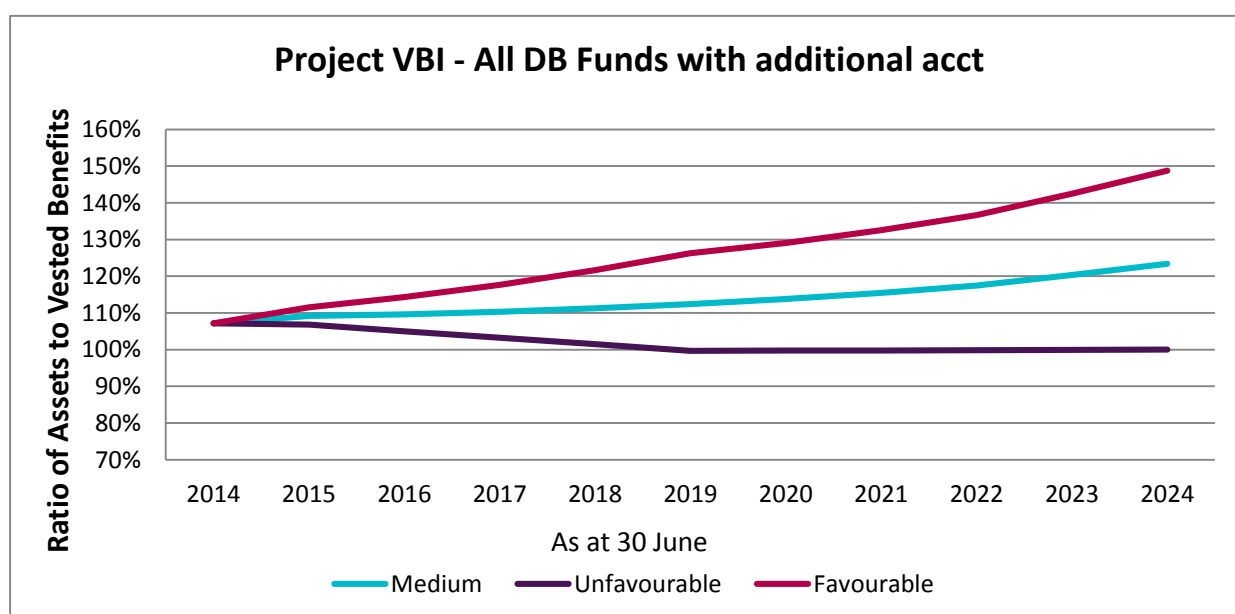
1.2 Overall Position of the Scheme

The ratio of the net value of Scheme assets to total vested benefits (the Vested Benefits Index, or VBI) at 30 June 2014 was 102.4% (including the reserves), which compares to 101.9% as at the date of the last full actuarial review of the Scheme as at 30 June 2011. The Scheme was therefore in a satisfactory financial position at the valuation date.

If the VBI is calculated for just the defined benefit members (i.e. excluding all accumulation members but including all defined benefit members' accumulation accounts) the VBI ratio is 108% at 30 June 2014 (106% at 30 June 2011).

Graph 1 shows the projected level of the Vested Benefit Index for all defined benefits sections combined (excluding allowance for defined benefits members' accumulation accounts) over the next 10 years, assuming that the Employers contribute at the rates recommended in this report (for Hobart City Council and Tasmanian Water, we have assumed they elect Option A). The projected VBI is shown for each of the three investment return scenarios (unfavourable, medium and favourable) discussed in the body of this report.

Graph 1. Projected VBI for defined benefits



The chart above indicates that, the VBI is expected to increase only slightly for several years and then a little more significantly if an investment return of 7% pa is maintained. The chart indicates that in the longer term the VBI is highly dependent on the investment return of the Scheme. If investment returns are in line with the medium scenario (7% p.a.) are realised then the Scheme is likely to remain in a 'satisfactory' position over the long term. Returns below this rate over the long term may well lead to an 'unsatisfactory' position.

1.3 Defined Benefits Funds

The Scheme had four defined benefit sub-funds at 30 June 2014:

- Quadrant Defined Benefits Fund
- HCC Defined Benefits Fund
- RACT Defined Benefits Fund
- LCC Defined Benefits Fund.

The Quadrant Defined Benefits Fund was in a satisfactory financial position as at 30 June 2014, with a VBI of 115.4%. Based on the assumptions used for this report (and an investment return of 7% pa in particular), we expect that the VBI will continue to be strong unless there is a significant downturn in the market value of Fund assets.

The HCC Defined Benefits Fund was in a satisfactory financial position as at 30 June 2014 with a vested benefits index of 107.4%. Based on the assumptions used for this report (and an investment return of 7% pa in particular), we expect that the VBI will remain reasonably static in the short term and then increase a little.

The RACT Defined Benefits Fund was in satisfactory financial positions as at 30 June 2014, with a VBI of 117%. In our view, this fund is likely to continue to be in a satisfactory financial position. The healthy margin of assets over vested benefits at 30 June 2014 is likely to have ensured the RACT Defined Benefits Fund remains in a satisfactory financial position but will decrease towards 100% as the last three members approach retirement.

We note that the financial position of the LCC Defined Benefits Fund was satisfactory as at 30 June 2014, with a vested benefits index (VBI) of 100.8%. This is the only defined benefit fund, not to have strengthened its financial position since 2011. Despite this, we expect a margin of assets over the VBI to be maintained in the short term, until the next actuarial review at 30 June 2017 and with slight increases in the longer term.

Section 3 (Defined Benefit Funds) of this report provides a summary of the results for each sub-fund and the attachments contain full reports on the actuarial investigations of each fund, including the statements required under the Superannuation Industry (Supervision) Act.

1.4 Reserves

After setting aside amounts to support the benefits of each of the sub-funds, the Scheme had total reserves as at 30 June 2014 of \$5.79 million which represents around 0.74% of the Scheme's assets.

1.5 Recommendations

1.5.1 Defined Benefit Funds

We recommend that the Employers contribute to the defined benefit funds at the current contribution rates until 30 June 2015 and at the rates set out in this report from 1 July 2015 until the completion of the next full actuarial investigation, which is due as at 30 June 2017.

The Trustee should briefly review the coverage of assets over vested benefits in each of the funds at each annual review date and the emerging investment returns in each fund year, to ensure that the Employer contribution rates remain appropriate.

1.5.2 Reserves

As at 30 June 2014, the Scheme holds reserves of \$5.79 million (0.74% of assets), a modest increase from the reserves held at 30 June 2011 of \$3.54 million (0.67% of assets). After completion of this review we will review the reserving policies of the Scheme.

The current reserves are more than adequate to meet the Operational Risk and APRA Capital requirements.

This report was prepared and peer reviewed for Quadrant Superannuation Scheme by the following consultants.

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2. Introduction

2.1 General

The purpose of this report is to present the results of the actuarial review of the Quadrant Superannuation Scheme (the Scheme) as at 30 June 2014.

This report is provided for the Trustee of the Scheme. Where this report is provided to third parties, it should be provided in its entirety.

This review is in accordance with the Trust Deed of the Scheme, the requirements of the Superannuation Industry (Supervision) Act 1993 and the associated Regulations and Superannuation Prudential Standard SPS160 Defined Benefit Matters, which require actuarial investigations to be carried out at least once every three years.

We have prepared this report in accordance with Professional Standard No. 400 of the Institute of Actuaries of Australia relating to the investigation of defined benefit superannuation funds.

2.2 Governing rules and structure of fund

The Scheme is a resident regulated fund and a complying fund for the purposes of the Superannuation Industry (Supervision) Act 1993. Provided it continues to comply with the relevant legislation, the Scheme is eligible for concessional tax treatment.

The Scheme operates with a number of different sub-funds.

Defined Benefit sub-funds:

- Quadrant Defined Benefits Fund
- HCC Defined Benefits Fund
- RACT Defined Benefits Fund
- LCC Defined Benefits Fund.

Accumulation sub-funds:

- Quadrant Accelerated Benefits Fund
- Quadrant Investment Choice Fund
- Quadrant Personal Super
- Quadrant Super Pension.

In accordance with the Scheme's current reserving policy, the excess of the total net assets of the Scheme over the sum of the assets allocated to the sub-funds constitutes the Scheme Reserves.

Under the Trust Deed, the sub-funds effectively operate as separate entities to the other parts of the Scheme. As a result, the Trustee has adopted a policy of determining the assets available to support the benefits of each sub-fund according to the transactions in each fund from time to time.

2.3 Name and capacity of actuary

This review has been undertaken by Geoff McRae, B.Sc., FIAA, of Rice Warner Actuaries.

2.4 Previous report

Geoff Morley, B.Sc., B.Com., FIAA carried out the previous actuarial investigation of the Scheme as at 30 June 2011 and his report on that investigation was dated 10 May 2012.

That report showed that the Scheme was in a satisfactory financial position as at 30 June 2011, but with one sub-fund, the HCC Defined Benefits Fund being in an 'unsatisfactory financial position' (with the assets less than the total of members' vested benefits) at the date of the investigation.

Therefore the Trustee developed a plan to restore the Fund to a satisfactory financial position, as required under superannuation law. This plan included higher contributions by certain of the participating Employers in the Scheme.

2.5 Significant events since the previous review

As noted in the previous report, from 1 July 2009 the Trustee has maintained accounting records to track the asset pools in respect of employees of Hobart City Council, Launceston City Council and each water corporation separately. These separate asset pools enable contribution rates for the different participating Employers to be determined in a way which reflects the experience of each Employer. From 1 July 2013, these water corporations merged into a single entity, TasWater. Reflecting the different benefits of those previously associated with each of the HCC and LCC Funds, we have separately reviewed the two groups of TasWater members.

2.6 Purpose of review

The purposes of this actuarial review are to:

- assess the financial position of the Scheme and each of the defined benefit sub-funds
- recommend an appropriate level of Employer contributions for the future, for each defined benefit sub-fund
- recommend the allocation of the Schemes reserves as at 30 June 2014 in accordance with the reserving policy
- satisfy the requirements of the Trust Deed
- meet the requirements of legislation and the Superannuation Prudential Standards.

2.7 Structure of Report

Section 3 of this report (Defined benefit Funds), summarises the results of the actuarial reviews of the defined benefit sub-funds as at 30 June 2014. The full reports on those reviews are provided in the Attachments to this report.

Section 4 of this report (Reserves), briefly considers the Scheme Reserves as at 30 June 2014, subject to a more complete review associated with a review of the Scheme's reserving policies, following completion of this investigation.

3. Defined Benefits Funds

This section summarises the results and recommendations arising from the actuarial reviews of each of the defined benefit sub-funds. The results presented in this section are based on the actuarial assumptions we have adopted for each sub-fund.

One of the key assumptions we have made for this review and for each of the reviews of the sub-funds, is the assumed rate of future investment returns. Over the long term, we have adopted an assumption of 7.0% p.a. (net of investment management expenses and taxes on investment earnings, but before deduction of Fund management expenses). However, to assess the sensitivity of the results to alternative investment market conditions, we have considered the three investment return scenarios in Table 2.

Table 2. Investment Return Scenarios

Scenario	2014/15 to 2018/19	2019/20 & later
Unfavourable	5.00%	7.00%
Medium	7.00%	7.00%
Favourable	9.00%	7.00%

Further details of the assumptions adopted are contained in the full reports on the actuarial reviews of each sub-fund, provided in the Appendices.

All contribution recommendations are effective from 1 July 2015 and assume that the current rates of contributions will continue until 30 June 2015.

3.1 Quadrant Defined Benefits Fund

3.1.1 Results

The investigation of the Quadrant Defined Benefits Fund shows that:

- The value of Fund assets at 30 June 2014 was 15% more than the total of members' vested benefits. That is, the Fund had a vested benefits index (VBI) of 115% (109% in 2011). Strong investment returns over the past two years, allied with modest average rates of salary increase since 2011 have been the main contributors to the strengthening financial position.

- At the current rate of Council contributions (11% of salary), and assuming no future allocations of Scheme surplus to the Fund, the VBI (in respect of defined benefits only) is projected to strengthen further. The projections suggest that if an investment return of 7% pa is maintained thereafter, the VBI will continue to strengthen.
- Lower investment returns that are on average 5% pa over the next 5 years will not lead to the VBI falling below 100%. Conversely, higher investment returns could lead to even greater strengthening of the VBI.
- In our view, the results suggest that the Councils could consider a contribution holiday for a period. However, given the current level of world investment markets, it would be prudent for the Councils to reduce the current contribution rate to 9.5% of salary, subject to further review in 2017.
- We expect the Fund to remain in a 'satisfactory financial position' from 1 July 2014 to 30 June 2017 (with assets above vested benefits).

3.1.2 Recommendations

Given the strengthening financial position of the Fund over the past three years, the Councils' contributions should be reduced to 9.5% of salary from 1 July 2015.

The Councils should also contribute the amount of any contributions required under awards or other employment agreements.

Noting that the future financial position of the Fund may vary from the projected levels (for example as a result of higher or lower investment returns), we also recommend that the Trustee continues its recent practice of briefly reviewing the recommended contribution rates after 30 June each year, to confirm they remain appropriate. If the Fund's financial position is stronger than expected, it may be appropriate for the Councils to pay lower contributions than those recommended above, while if the financial position significantly weakens it may be necessary to pay higher contributions.

3.2 HCC Defined Benefits Fund

3.2.1 Results

The investigation of the HCC Defined Benefits Fund shows that:

- Strong investment returns over the past two years, allied with modest average rates of salary increase since 2011 have contributed to the strengthening financial position. This strengthening has been underpinned by the additional contributions being made by the Employers as part of the restoration plan.
- The value of Fund assets at 30 June 2014 was 7% higher than the total of members' vested benefits. That is, the Fund had a vested benefits index (VBI) of 107% (97% in 2011). Hence the Fund was in a 'satisfactory financial position' as at the date of this review.
- Earlier in 2014, I recommended that the planned additional contributions in the restoration plan be discontinued from 1 July 2014. At the current rate of Council contributions (9.5% of salary for HCC and 12% for TasWater), the VBIs (in respect of defined benefits only) are projected to:

- remain relatively stable in the short term for HCC
- continue to strengthen for TasWater
- remain relatively stable for a number of years and then, if an investment return of 7% pa is maintained thereafter, the VBI will strengthen slightly from year seven onwards.
- Lower investment returns that are on average 5% pa over the next five years may lead to the VBI falling below 100%. Conversely, investment returns higher than 7% could lead to a further strengthening of the VBI.
- The results suggest that TasWater could consider a reduction in its employer contribution rate. Given the current level of world investment markets, it would be prudent to adopt the following employer contribution rates:
 - for HCC, either:
 - > Option A. 11% of salary from 1/7/2015
 - > Option B. 9.5% of salary from 1/7/2015, subject to review each year.
 - for TasWater, reduce the current contribution rate to 11% of salary from 1/7/2015.
- We expect the Fund to remain in a 'satisfactory financial position' from 1 July 2014 to 30 June 2017 (with assets above vested benefits).

3.2.2 Recommendations

Given, given the current level of world investment markets, we recommend the adoption of the following employer contribution rates:

- for HCC, either:
 - Option A. 11% of salary from 1/7/2015
 - Option B. 9.5% of salary from 1/7/2015, subject to review each year.
- for TasWater, reduce the current contribution rate to 11% of salary from 1 July 2015.

The employers should also contribute the amount of any contributions required under awards or other employment agreements.

Noting that the future financial position of the Fund may vary from the projected levels (for example as a result of higher or lower investment returns), we also recommend that the Trustee continues its recent practice of briefly reviewing the recommended contribution rates after 30 June each year, to confirm they remain appropriate. If the Fund's financial position is stronger than expected, it may be appropriate for the employers to pay lower contributions than those recommended above, while if the financial position significantly weakens it may be necessary to pay higher contributions.

3.3 RACT Defined Benefits Fund

3.3.1 Results

The actuarial review of the RACT Defined Benefits Fund shows that:

- The financial position of the Fund has remained strong since the last actuarial review. As with the other Funds above, the main factors have been the strong investment returns over the last two years, allied with modest levels of salary increase.
- The value of Fund assets at 30 June 2014 was 17% more than the total of members' vested benefits. That is, the Fund had a vested benefits index (VBI) of 117% (115% in 2011).
- At the current rate of Employer contributions (1.5 times member contributions), assuming an average 7% pa investment return, the VBI is projected to fall gradually but to consistently be well in excess of 100% until the last member leaves the Fund. Given the very small membership (three members) remaining in the Fund, in practice the VBI will in future be quite sensitive to when members leave and the amounts of their benefits (related to the rate of salary increase) , in addition to the actual investment returns.
- As a result, the financial position over time may be volatile, as each exiting member has a proportionally larger impact on the Fund as a whole.

3.3.2 Recommendations

We recommend that the Employer reduces its contribution rate to 1.25 times member contributions (including deemed contributions) from 1 July 2015.

However, it may be appropriate for the Employer to vary its contributions periodically, taking into account the most recent analysis of the Fund's financial position. The declining membership means that the VBI may be more variable, and therefore the Employer may need to either reduce its contributions in future (to avoid over-funding the benefits) or to increase its contributions (to maintain security of benefits, for example as a result of ongoing poor investment returns).

Therefore we also recommend that the Trustee (in consultation with the Employer) carries out a brief review of the Employer contribution rate after each 30 June annual review and after each member retires, to ensure it remains appropriate.

The Employer should continue to contribute the amount of any deemed member contributions, grossed up for the 15% contributions tax payable by the Trustee. Any contributions payable by members should also continue to be remitted to the Fund.

3.4 LCC Defined Benefits Fund

3.4.1 Results

The investigation of the LCC Defined Benefits Fund shows that:

- The Fund was in a satisfactory financial position as at 30 June 2011 (i.e. assets greater than vested benefits). Despite similar economic results (investment returns and salary increases) since 1/7/2011 to the other Funds, this Fund is the only one with a weaker financial position in 2014 than that in 2011. This weakening is related to:
 - Significant salary increases being concentrated in the first of the three years.
 - Contributions being set as at the 2011 actuarial review assuming no Early Retirement Benefits would be paid. In practice, they have been paid to those leaving service after age 55.
 - A greater proportion of members over age 55 holding accumulation benefits rather than defined benefits.
- The two sponsoring employers of members of the Fund have advised that Early Retirement Benefits are paid to members leaving service over age 55. Thus, we have calculated the members' vested benefits on this basis. The Fund had a vested benefits index (VBI) of 101%.
- On the same early retirement benefit basis as that applied in 2011, the value of Fund assets at 30 June 2014 was 3% more than the total of members' vested benefits. That is, the Fund had a vested benefits index (VBI) of 103% (assuming consent is required and not provided for higher early retirement benefits, where applicable, and including allowance for additional accumulation benefits). The equivalent VBI in 2011 was 106%.
- We performed separate future contribution rate calculations for the Launceston City Council and TasWater members (previously Ben Lomond Water and Onstream). These projections indicated an average cost of future accruing benefits of 9.6% of salary for LCC and 9.3% for Taswater, the slightly higher cost arising from a slightly different mix of ages and members in each benefit category.
- Projections of the VBI for the Fund, assuming an investment return of 7% and a continuation of current contribution rates showed the Fund maintaining its current VBI in the short term followed by a later slight strengthening.
- We understand that Launceston City Council is no longer admitting new employees to the Fund. This is consistent with the earlier closure of the Fund to new entrants by TasWater employers.

3.4.2 Recommendations

Taking account of the calculated employer cost of future accruing benefits, the current and projected levels of the funding indices under the investment return scenarios considered in this report, we recommend that Launceston City Council contributions to the Fund increase to a rate of 11% of salary (or pays a lump sum contribution and adjusts the future employer contribution rate to a level agreed in writing between the Trustee and the employer, after seeking advice from the Fund actuary), and that TasWater increase its contribution rate to 12.5% of salary, both from 1 July 2015. The rationale for the increase for LCC is the small current margin of assets over vested benefits. For TasWater, the higher rate is designed to improve the current VBI of 99%.

Noting that the future financial position of the Fund may vary from the projected levels (for example as a result of higher or lower investment returns), we also recommend that the Trustee continues its recent practice of briefly reviewing the recommended contribution rates after 30 June each year, to confirm they remain appropriate. If the Fund's financial position is stronger than expected, it may be appropriate for the employers to pay lower contributions than those recommended above, while if the financial position significantly weakens it may be necessary to pay higher contributions.

In addition the Employers should continue to contribute:

- Contributions to defined benefit members' accumulation accounts under the Employer's Enterprise Agreement (currently 6% of salary), for those permanent employees who have these contributions paid to this Fund.
- Member contributions as required under the Fund's rules for defined benefit members, whether from after-tax salary, by salary sacrifice or deemed contributions (grossed up for contributions tax where appropriate).
- Contributions in accordance with the Enterprise Agreement (currently 12% of salary) in respect of those temporary and casual employees who have these contributions paid to accumulation accounts in this Fund.
- Any voluntary member or Employer contributions.

Finally, we recommend that the basis for determining the 'equitable share', payable to retrenched members, detailed in the previous actuarial review report be maintained. It will continue to be reviewed, to ensure that it remains appropriate.

4. Reserves

4.1 Reserving Policy

The Trustee has in place a reserving policy. As part of that policy, the Trustee may from time to time establish the following reserves in the Scheme:

- Reserves within each Defined Benefits Fund.
- An Investment Fluctuation Reserve for the Scheme.
- An Operational Reserve.
- A General Reserve for the Scheme.

The reserving policy will be reviewed after the completion of this investigation. A more complete report on Scheme reserves will be prepared as part of that review

4.2 Reserve Position at 30 June 2014

Details of the Scheme reserves and vested benefits are shown in table 1.

As at 30 June 2014, the Scheme holds reserves of \$5.79 million (0.74% of assets). This is a modest increase from the reserves held at 30 June 2011 of \$3.54 million (0.67% of assets). The current reserves are more than adequate to meet the Operational Risk Financial Requirement (0.25% of assets) and APRA Capital Requirements (\$500,000). APRA has advised that the Capital Requirement was to be included in the Operational Risk Financial Requirement from 1 July 2013 but it has not yet been removed from the Trustee's licensing conditions.

4.3 Next Actuarial Investigation

A formal review of the employer contributions will also be required with the next full actuarial investigation into the Scheme as at 30 June 2017, as required under the SIS Regulations and the Superannuation Prudential Standards.

Yours sincerely,



GEOFF MCRAE, B.Sc.

Fellow of the Institute of Actuaries of Australia

Attachment A

Actuarial Review of the Quadrant Defined Benefits Fund

As at 30 June 2014

Prepared by:

Geoff McRae, B.Sc. FIAA

Rice Warner Actuaries

17 March 2015

17 March 2015

Mr Wayne Davy
Chief Executive Officer
Quadrant Superannuation Scheme GPO Box 863
HOBART TAS 7001

Dear Wayne,

Quadrant defined benefits fund actuarial review as at 30 June 2014

We have carried out an investigation into the Quadrant Defined Benefits Fund ('the Fund') using the member data and other information provided as at 30 June 2014 and set out the results of the review and our findings in this report.

For this review we have applied the Aggregate Funding method. This method determines a single contribution rate, for each sub-fund (or each benefit category within each sub-fund), which is the contribution rate required to fund the total benefits for existing employees, allowing for the assets actually held, but ignoring new entrants. It is calculated as the present value of all benefits expected to be payable to existing members, less the value of the assets held and the present value of future contributions by current members, divided by the present value of all future salaries of the existing members.

1. Executive Summary

The investigation was carried out as part of the full triennial investigation into the Quadrant Superannuation Scheme, as required under the Superannuation Industry (Supervision) Act 1993 and the associated Regulations. The main purpose of the investigation into the Fund is to review the rate of Council contributions payable to the Fund.

The investigation shows that:

- The value of Fund assets at 30 June 2014 was 15% more than the total of members' vested benefits. That is, the Fund had a vested benefits index (VBI) of 115% (109% in 2011). Strong investment returns over the past two years, allied with modest average rates of salary increase since 2011 have been the main contributors to the strengthening financial position.
- At the current rate of Council contributions (11.0% of salary), and assuming no future allocations of Scheme surplus to the Fund, the VBI (in respect of defined benefits only) is projected to strengthen further. The projections suggest that if an investment return of 7% p.a. is maintained thereafter, the VBI will continue to strengthen.

- Lower investment returns that are on average 5% p.a. over the next five years will not lead to VBI falling below 100%. Conversely, higher investment returns could lead to even greater strengthening of the VBI
- In our view, the results suggest that the Councils could consider a contribution holiday for a period. However, given the current level of world investment markets, it would be prudent for the Councils to reduce the current contribution rate to 9.5% of salary, subject to further review in 2017.
- We expect the Fund to remain in a 'satisfactory financial position' from 1 July 2014 to 30 June 2017 (with assets above vested benefits).

1.1 Recommendations

Given the strengthening financial position of the Fund over the past three years, the Councils' contributions should be reduced to 9.5% of salary from 1 July 2015.

The Councils should also contribute the amount of any contributions required under awards or other employment agreements.

Noting that the future financial position of the Fund may vary from the projected levels (for example, as a result of higher or lower investment returns), we also recommend that the Trustee continues its recent practice of briefly reviewing the recommended contribution rates after 30 June each year, to confirm they remain appropriate. If the Fund's financial position is stronger than expected, it may be appropriate for Councils to pay lower contributions than those recommended above, while if the financial position significantly weakens it may be necessary to pay higher contributions.

2. Introduction

2.1 General

The purpose of this report is to present the results of the actuarial review of the Quadrant Defined Benefits Fund ('the Fund') as at 30 June 2014. The Fund is a sub-fund of the Quadrant Superannuation Scheme ('the Scheme').

This report is provided for the Trustee of the Scheme. Where this report is provided to third parties, it should be provided in its entirety. The review of the Fund is part of a full actuarial review of the Scheme in accordance with the Trust Deed of the Scheme and meets the requirements of the Superannuation Industry (Supervision) Act 1993 and the associated Regulations, which require actuarial investigations to be carried out at least once every three years.

We have prepared this report in accordance with Professional Standard No. 400 of the Institute of Actuaries of Australia relating to the actuarial review of defined benefit superannuation funds. We have also considered the requirements of Prudential Standard SPS 160 Defined Benefit Matters.

2.2 Governing Rules and Structure of Fund

The Scheme is a resident regulated fund and a complying fund for the purposes of the Superannuation Industry (Supervision) Act 1993. Provided it continues to comply with the relevant legislation, the Scheme is eligible for concessional tax treatment.

The Fund is a defined benefit sub-fund of the Scheme and provides lump sum benefits to members. The Fund is closed to new members.

A summary of the Fund's main benefit provisions is set out in Appendix A of this report. For full details of the Fund's benefits, reference should be made to the Scheme's Trust Deed and the Fund's governing rules.

2.3 Name and Capacity of Actuary

This review has been undertaken by Geoff McRae, Fellow of the Institute of Actuaries of Australia, in his capacity as an employee of Rice Warner.

2.4 Previous Report

The previous actuarial review of the Fund as at 30 June 2011 was carried out by Geoff Morley, B.Sc. B.Com. FIAA, of Bendzulla Actuarial Pty Ltd, and was dated 8 May 2012.

That report showed that the Scheme was in a sound financial position with the assets exceeding the total of members' vested benefits by 9% (VBI = 109%) at that date. The Councils were recommended to contribute as follows:

- 9.5% of salaries in 2011/12
- 9.5% of salaries in 2012/13
- 10.5% of salaries in 2013/14
- 11.0% of salaries in 2014/15 until the date of the next actuarial review.

2.5 Significant Events since the Previous Review

We are not aware of any significant events that have occurred between 30 June 2011 and 30 June 2014, or since 30 June 2014, that we have not already taken into account, which would have a material impact on the recommendations in this report.

2.6 Purpose of Review

The purposes of this actuarial review are to:

- assess the financial position of the Fund
- recommend an appropriate level of Council contributions for the future
- satisfy the requirements of the Trust Deed
- meet the legislative requirements.

3. Fund experience

3.1 Data Provided

The Scheme administrators provided us with the following information:

- membership details for the Fund as at 30 June 2014
- salary histories of members for the past four annual review dates
- details of Assets for each sub-fund as at 30 June 2014
- information about investment returns after 1 July 2014.

A summary of the membership data at the current and previous investigations is shown in Table 1.

Table 1. Current and previous membership data

	30/06/2014		30/06/2011	
Category	Number	Salaries	Number	Salaries
85	187	\$12,265,000	233	\$13,513,571

The number of members has reduced by 46 (about 20%) over the three years since the last review.

Graph 2 shows the numbers of defined benefit members in the different age bands at 30 June 2014:

Graph 2. Number of members by Age bands

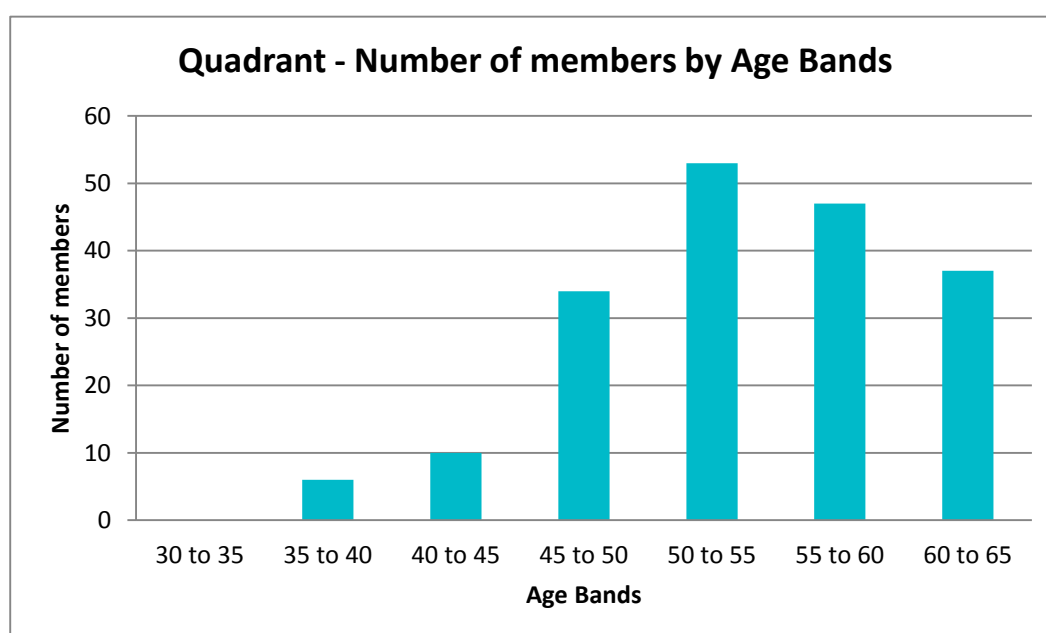


Table 2 shows average age and membership statistics by membership category at the current and previous actuarial review dates:

Table 2. Average age and membership statistics

	30/06/2014		30/06/2011	
Category	Average Age	Average Membership	Average Age	Average Membership
85	53.4 yrs	24.8 yrs	51.9 yrs	24.4 yrs

The data shows that:

- The average age of the members at 30 June 2014 was 53.4 years, an increase of 1.5 years on the average age three years previously.
- About 45% of the members were aged 55 or over at 30 June 2014 and were therefore immediately eligible for retirement benefits.
- A further 28% of the members were between the ages of 50 and 55.
- There were no members under 35 and only six under 40.

The Fund has a mature age profile and is likely to reduce in size steadily over the next few years. The membership details provided showed total vested benefits as at 30 June 2014 of \$57,475,000.

4. Assets

The market value of the net assets as at 30 June 2014 was provided by the Fund's personnel and it was equal to approximately \$66,310,000. We have taken this amount to be the value of assets available to support the Fund's liabilities.

The Fund is invested in a range of asset classes in accordance with the Trustee's investment policy for the assets supporting defined benefit liabilities, with a target weighting of about 70% to growth assets (such as shares and property) and 30% to defensive assets (such as fixed interest and cash). We consider that this allocation is within the range of alternatives suitable to support the liabilities of the Fund. We, however, recommend that the specific asset allocations be kept under review because of the age profile of the Fund and the weighted average term of liabilities (see Section 11.6 - Taxation).

4.1 Investment Returns

The average return on the Fund's assets over the 3 years to 30 June 2014 was 9.8% p.a. (net of investment management expenses and tax, but before deduction of Fund management expenses). This was greater than the return of 7% assumed in the previous actuarial review and has therefore had a positive impact on the financial position of the Fund as at 30 June 2014, compared to that projected in the 2011 review.

The investment return for the period from 30 June 2014 up to 31 December 2014 was 3.8% (7.6% pa) this is higher than the 7% pa adopted in our review assumptions. This is expected to have a positive impact on the Fund's financial positions.

4.2 Salary Increases

Members who remained in the Fund over the three year period since the last review experienced average salary increases of 4.2% pa compared with the 4.0% pa assumed in the 2011 actuarial review.

The slightly higher than expected salary increases have had a small negative impact on the financial position of the Fund as the salary related liabilities have increased by more than expected.

4.3 Expenses

The Total Fee for the 2013/2014 financial year was equal to 1.21% pa. This comprised 0.30% of Reserve Fee, 0.05% of Asset Consultant Fee, 0.06% of Custodian Fee and 0.80% of Administration Fee. An allowance for expenses at 1.25% pa is assumed, the same as that used in the previous review. These charges are also deducted off the crediting rates applied to members' benefits.

We have therefore allowed for a deduction (from both the Fund's investment return and the crediting rate applied to members) at the above rates in all future years.

4.4 Interest Crediting Rate

From 1 July 2011, the crediting rate applied to Defined Benefit or Accelerated Benefit accounts changed from a three year smoothed rate to an annual unsmoothed rate. The crediting rate is now based on the investment return on the fund's assets, adjusted for fees and taxes in accordance with the crediting rate policy adopted by the Quadrant Trustee. Therefore, the interest rate credited each year will closely reflect the investment return in that same year. This removes one source of fluctuation in the Fund's future financial position, because movements in the parts of members' benefits that are linked the crediting rates will be more closely aligned to movements in the Fund's asset values.

5. Financial position

5.1 Measures of Solvency

There are a number of ways to measure the financial position of the Fund at the review date. We have adopted the following measures which are compared to the value of the Fund's assets:

- **Vested Benefits:** the benefits to which members would have been entitled had they voluntarily left service as at 30 June 2014.
- **Accrued Retirement Benefits:** A member's Accrued Retirement Benefits as at 30 June 2014 is calculated as:

$$\begin{aligned} & \text{Accrued Benefit Multiple} && \text{times} && \text{Final Average Salary at} \\ & \text{at the valuation date} && && \text{the valuation date} \\ & && \text{plus} && \\ & && \text{the member's additional accumulation accounts.} \end{aligned}$$

The ARB is also subject to a minimum of the vested benefit.

- **Past Service Liabilities:** The present value of that part of members' future expected benefit entitlements which have accrued up to 30 June 2014. This figure is an actuarial estimate, and represents our best estimate of the accrued liabilities of the Fund as at 30 June 2014. The additional accumulation accounts are included at their face values as at 30 June 2014.
- **Minimum Requisite Benefits ('MRBs'):** the minimum benefit required to be made available to employees in order that the Councils satisfy their superannuation guarantee obligations. If the assets fall below this figure, the Fund is regarded as 'technically insolvent'.

In each case, we have calculated an index by dividing the value of assets by the total of the relevant measure for all members. We have included the value of members' accumulation accounts in the liability measures.

Table 3 shows the indices at the current review.

Table 3. Indices at current review

	30/06/2014 Assets = \$66,310,000		30/06/2011 Assets = \$57,588,247	
Measure	Total of Measure (\$'000)	Index (%)	Total of Measure (\$'000)	Index (%)
Vested Benefits	\$57,475	115%	\$52,795	109%
Accrued Retirement Benefits	\$60,033	110%	\$57,664	100%
Past Service Liabilities	\$58,093	114%	\$57,330	100%
MRBs	\$46,522	143%	\$42,191	136%

The ratios in Table 3 show that the Fund was in a strong financial position as at 30 June 2014. Our comments on the individual indices are:

- The vested benefits remain covered by assets as at 30 June 2014. As a result of positive returns since 30 June 2014, the VBI is likely to currently remain above 100%.
- The fact that the coverage of assets over past service liabilities is greater than 100% indicates a sound level of funding at the valuation date.
- The minimum requisite benefits (MRBs) were very well funded as at 30 June 2014.
- It should be noted that the investment return for the period from 30 June 2014 up to 31 December 2014 was 3.8% (7.6% pa); this is higher than the 7% pa adopted in our review assumptions. This is expected to have a positive impact on the Fund's financial positions.

5.2 Measures excluding Accumulation Accounts

Accumulation benefits are usually treated as being fully vested in the members and hence should be regarded as fully funded already. When considering the position of the Fund, it is instructive to reduce the value of the assets for any accumulation benefits, and compare this figure to the liabilities in respect of the defined benefits only. The funding indices excluding accumulation accounts at 30 June 2014 are as follows:

Table 4. Indices excluding accumulation accounts at 30 June 2014

Measure	Index %
Vested Benefits	118%
Accrued Retirement Benefits	112%
Past Service Liabilities	117%
MRBs	152%

6. Insurance Position

The Fund is protected against adverse death and disablement experience by means of group life insurance arrangements covering the lump sum death and permanent disability (TPD) risks.

Table 5 compares the Fund's asset value and the sums insured as at 30 June 2014 to the total lump sum death benefits. It shows that the Fund's insurance arrangements are more than sufficient to cover the total death and TPD benefits.

Table 5. Fund's asset value and the sums insured as at 30 June 2014

Quadrant Defined Benefit Fund	Death Benefits \$'000	TPD Benefits \$'000
Value of Assets	66,310	66,310
Sums Insured	15,637	12,825
Total Assets plus insurance	81,947	79,135

Quadrant Defined Benefit Fund	Death Benefits \$'000	TPD Benefits \$'000
Total Death and TPD Benefits	79,042	76,688
Excess/ (Shortfall)	2,905	2,447
Excess as % Total Death/TPD Benefits	3.7%	3.2%

For a defined benefit fund, it is normal that the value of the assets plus the value of the sums insured does not exactly equal the total death and TPD benefits. There will generally be a small excess or shortfall, which varies in line with movements in the Fund's assets. In our view, the excess above is not unreasonable in this context.

7. Funding the benefits

7.1 General Comments

Over the life of the Fund, the ultimate cost to the Councils of providing the benefits will be equal to:

- the amount of benefits paid out
- the expenses of running the Fund including tax
- members' contributions; and the return on investments.

Since the benefits are linked to members' salaries, the cost of providing the benefits will depend on the Fund's experience in relation to:

- economic factors such as the investment return obtained on the Fund's assets and the rates at which salaries increase
- factors influencing membership turnover such as mortality and disability, resignation and retirement.

The valuation process involves making assumptions about the likely levels of the above factors in the future. Using these assumptions, we can project the expected future cash flows and benefits for the current members of the Fund. By discounting these cash flows, we derive a present value for the liabilities which we can compare to the value of the current assets.

The ultimate cost to the Councils will not depend on the actuarial assumptions or methods used to project the cash flows and benefits, but on the actual experience of the Fund. The financing method and the actuarial assumptions will however affect the timing of the cost to the Councils.

7.2 Financing Method

There are various financing methods that can be used to determine the Councils' contributions that should be paid over time. The funding method adopted in this review is different from the method used at the previous review (target funding method). This review uses the aggregate funding method to determine the contribution rate adjusted for surplus and the Employer cost for future service, which equal to 0% pa and 10.6% pa respectively.

The contribution rate adjusted for surplus indicates the level of contribution required when surplus assets are taken into account and assumptions on which the calculations are based are as expected. If the future investment returns are lower than expected, the surplus will be depleted and this level of contribution will not be sufficient. Therefore, this contribution rate is used as a lower bound for determining the recommended contribution rate.

The Employer cost for future service does not take into account any surplus that has accumulated. It gives an indication of the level of contribution required when there is no surplus. This is a more prudent measure and it also normally sets the upper bound for determining the recommended contribution rate.

Nevertheless, the stability of the Councils' contributions over time will depend on how closely the Fund's actual experience matches the expected experience. If the actual experience differs from that expected, the Councils' contribution rate may need to be adjusted accordingly to ensure the Fund remains on course towards its target of financing members' benefits.

7.3 Assumptions

Taking into account the long-term experience of superannuation funds with investment strategies that are similar to that adopted for this Fund, we have adopted a long-term assumption of 7.0% p.a. for investment returns (net of investment expenses and taxes on investment earnings, but before deduction of the Fund management expenses).

However, to assess the sensitivity of the results to alternative investment market conditions, in the short term we have considered the three alternative scenarios in the table 6.

Table 6. Alternative scenarios

Scenario	2014/15 to 2018/19	2019/20 & later
Unfavourable	5.00% pa	7.00% pa
Medium	7.00% pa	7.00% pa
Favourable	9.00% pa	7.00% pa

We have assumed salary increases of 4.0% pa, inclusive of promotional increases.

The long-term investment return assumption and the salary growth assumption are the same as those adopted for the 2011 actuarial review and maintain the assumed real rate of return assumption at 3.0% pa (before expenses). In addition, the unfavourable and favourable scenarios have been selected to illustrate the impact of a period of under or over performance of the Fund's investments, relative

to the medium scenario. The unfavourable scenario assumes under-performance of 2% pa from 1 July 2014 up to 30 June 2019, while the favourable scenario assumes over-performance of 2% pa from 1 July 2014 up to 30 June 2019.

From 1 July 2011, the crediting rate applied to Defined Benefit or Accelerated Benefit accounts changed from a three year smoothed rate to an annual unsmoothed rate. Therefore we have assumed that after that date, the interest credited to members' accounts will be equal to the investment return (after adjustment for the administration fees borne by members).

The decrement rates for resignation and retirement used in this review are the same as the ones used in the previous review as at 30 June 2011. The other decrements are similar to those used at the previous review.

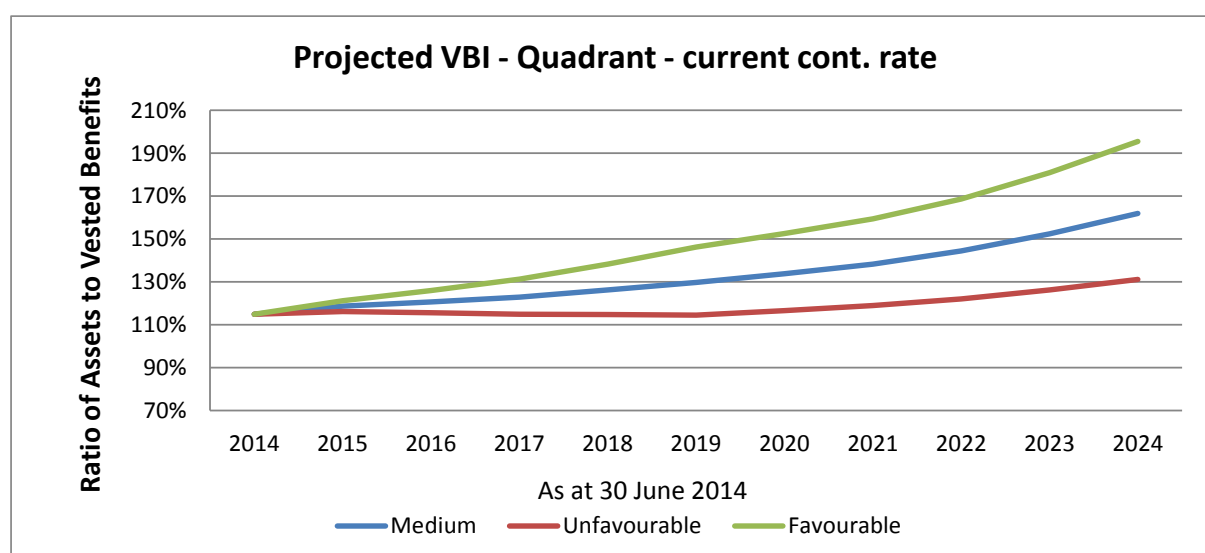
Appendix B (Benefit summary) sets out the valuation basis in more detail.

8. Council contributions

8.1 Projections of Funding Indices

Graph 3 shows the projected level of the Vested Benefit Index (VBI) including members' accumulation accounts over the next 10 years. At the current rate of Council contributions (11% of salary), and assuming no future allocations of Scheme surplus to the Fund, the VBI is projected to strengthen further. The projected VBI is shown for each of the investment return scenarios (unfavourable, medium and favourable) discussed in section 7.3, above.

Graph 3. Projected VBI

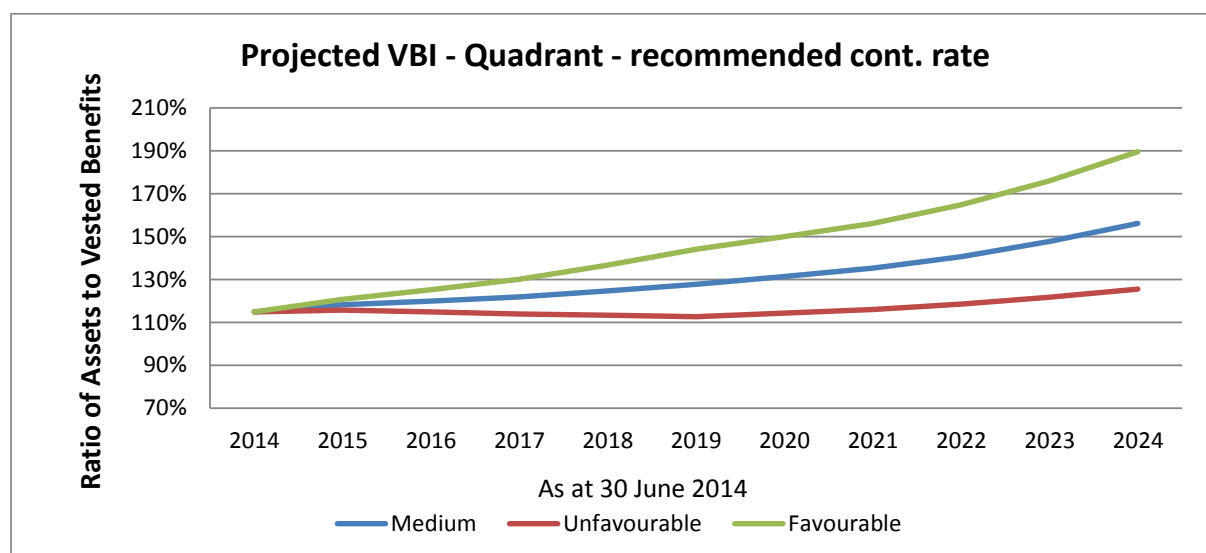


The Quadrant Defined Benefits Fund was in a satisfactory financial position as at 30 June 2014, with a VBI of 115.4%. The projections suggest that if an investment return of 7% pa is maintained thereafter, the VBI will continue to strengthen. Lower investment returns that are on average 5% pa over the next 5 years will not lead to the VBI falling below 100%. Conversely, higher investment returns would lead to even greater strengthening of the VBI.

The results in the table above suggest that the Councils could reduce their contribution rate. We have recommended a rate of 9.5% of members' salaries.

The results of this approach are shown in Graph 4.

Graph 4. Results



This projection indicates that under the medium investment return scenario, the VBI will continue to strengthen, reach around 128% in five years' time. Under the favourable scenario the VBI reaches 144% after 5 years while under the unfavourable scenario the VBI falls to 113% after five years.

The graphs on this and the previous page confirm that the projected VBI is sensitive to future investment returns.

8.2 Recommended Council Contributions

Given the strengthening financial position of the Fund over the past three years, we recommend that the Councils' contributions be reduced to 9.5% of salary from 1 July 2015.

The Councils should also contribute the amount of any contributions required under awards or other employment agreements.

Noting that the future financial position of the Fund may vary from the projected levels (for example, as a result of higher or lower investment returns), we also recommend that the Trustee continues its recent practice of briefly reviewing the recommended contribution rates after 30 June each year, to confirm they remain appropriate. If the Fund's financial position is stronger than expected, it may be appropriate for Councils to pay lower contributions than those recommended above, while if the financial position significantly weakens it may be necessary to pay higher contributions.

Our review indicates that the Fund was in a 'satisfactory financial position' as at 30 June 2014, and is expected to remain in such a position until the time of the next actuarial review as at 30 June 2017.

8.3 Next Actuarial Investigation

A formal review of the Councils contributions will be required with the next full actuarial investigation into the Scheme as at 30 June 2017, as required under the superannuation law.

Yours sincerely,



GEOFF MCRAE, B.Sc. FIAA

Rice Warner

9. Benefit summary

9.1 Eligibility

This is a summary of the defined benefit arrangement for council employees (other than employees of the Hobart and Launceston City Councils who have separate arrangements). Defined benefit membership is now a closed category and all new council employees who elect to join the Scheme join the Investment Choice section.

9.2 Contributions

9.2.1 Member Contributions

All defined benefit members contribute at the rate of 6% of salary.

9.2.2 Council Contributions

The Councils contribute the balance required to fund the members' benefits.

9.3 Definitions

- Review Date
 - The Review Date is 30 June in each year.
- Final Average Salary
 - For Category 85 members, the average of the annual review date salaries on the two annual review dates prior to the date of leaving, with special provisions where service is less than two years.
- Normal Retirement Date
 - The member's 65th birthday.
- Member Basic Account
 - The accumulation of the regular member contributions of 6% of salary with compound interest.
- Member Voluntary Account
 - The accumulation of any voluntary member contributions (over and above the regular contributions) with compound interest. Includes the accumulation of any member rollovers with compound interest. This account is paid in addition to all other benefits.
- Member Award Account
 - The accumulation of any salary sacrifice or award contributions with compound interest. This account is paid in addition to all other benefits.

- Member Surcharge Liability Account
 - The accumulation of contribution surcharge assessments paid by the Trustee in respect of the member, together with interest at the crediting rate.
- SG Minimum Account
 - The accumulation of the Superannuation Guarantee employer funded minimum amount together with compound interest. This account is added to the total of all the other accounts to obtain the Superannuation Guarantee overall minimum benefit for a member.

9.4 Benefits

9.4.1 Normal Retirement Benefit

The benefit paid to a member who retires on his Normal Retirement Date is calculated as follows: 15% of Final Average Salary for each year of Category 85 membership, plus:

- 15% of Final Average Salary for each year of Category 82 membership
- 12.5% of Final Average Salary for each year of Category 72 membership

With membership measured in years and complete months, plus the following account balances:
Member Voluntary Account:

- Member Award Account
- Member Surcharge Liability Account.

This benefit is subject to a minimum of the Resignation Benefit and the SG Minimum Benefit.

9.4.2 Early Retirement Benefit

A member who retires within ten years of his Normal Retirement Date is entitled to an Early Retirement Benefit calculated in the same way as the Normal Retirement Benefit but including only membership completed at the date of retirement.

This benefit is subject to a minimum of the Resignation Benefit and the SG Minimum Benefit.

9.4.3 Late Retirement Benefit

If a member retires after his Normal Retirement Date, the benefit payable is the benefit which would have been payable had he retired on his Normal Retirement Date, together with compound interest on that benefit until the date of actual retirement.

This benefit is subject to a minimum of the Resignation Benefit and the SG Minimum Benefit.

9.4.4 Death Benefit

The benefit paid on death is the benefit that would have been paid if the member had retired on the Normal Retirement Date, with salary and category at the date of death remaining unchanged until the Normal Retirement Date.

This benefit is subject to a minimum of the Resignation Benefit and the SG Minimum Benefit.

9.4.5 Disablement Benefit

The benefit paid on disablement is dependent on the member's age next birthday at the annual review date prior to the date of disablement.

If the age is less than 56, the disablement benefit is equal to the death benefit which would have been paid had the member died on the date of disablement.

If the age is greater than 59, the disablement benefit is equal to the early retirement benefit which would have been paid had the member retired on that date.

If the age is between 56 and 59 inclusive, the disablement benefit is calculated as follows:

$$\text{Disablement Benefit} = \text{ERB} + \text{Fraction} \times \{DB - \text{ERB}\}$$

where

ERB is the Early Retirement Benefit as defined in this section

DB is the Death Benefit as defined in this section

Fraction = 0.2 times (60 – Age) with age calculated as above.

This benefit is subject to a minimum of the Resignation Benefit and the SG Minimum Benefit. This benefit is also subject to a further minimum of the value of the member's Death Benefit calculated as at the Review Date before the member's 55 birthday.

9.4.6 Resignation Benefit

If a member leaves employment and is not eligible for any of the above benefits, the resignation benefit is payable. This is calculated as follows:

Category 85 members

The member's Member Basic Account increased by 5% for each completed year of membership in excess of 5 years, with a maximum increase of 100%, plus the sum of the following accounts:

- Member Voluntary Account Member

- Award Account
- Member Surcharge Liability Account.

9.4.7 SG Minimum Benefit

This benefit is a minimum benefit to be paid when a member is paid a benefit for any reason. It is calculated by taking the sum of the following accounts:

- Member Basic Account Member
- Voluntary Account Member Award
- Account
- Member Surcharge Liability Account SG
- Minimum Account.

10. Summary of valuation basis

Table 7. Summary of valuation basis

Method	Aggregate funding												
Economic Assumptions													
Investment Return	<p>A long-term assumption of 7.0% pa (net of investment expenses and taxes on investment earnings, but before deduction of Fund management expense).</p> <p>However, to assess the sensitivity of the results to alternative investment market conditions, in the short term we have assumed the three scenarios in the table below will apply.</p> <table><tr><th>Scenario</th><th>2014/15 to 2018/19</th><th>2019/20 & later</th></tr><tr><td>Unfavourable</td><td>5.00%</td><td>7.00%</td></tr><tr><td>Medium</td><td>7.00%</td><td>7.00%</td></tr><tr><td>Favourable</td><td>9.00%</td><td>7.00%</td></tr></table> <p>For purposes of the statements required in accordance with AAS25 (see appendix C), we have used the assumptions in the ‘medium’ scenario.</p>	Scenario	2014/15 to 2018/19	2019/20 & later	Unfavourable	5.00%	7.00%	Medium	7.00%	7.00%	Favourable	9.00%	7.00%
Scenario	2014/15 to 2018/19	2019/20 & later											
Unfavourable	5.00%	7.00%											
Medium	7.00%	7.00%											
Favourable	9.00%	7.00%											
Salary Increase Rate	4.0% pa inclusive of promotional increases.												
Fund Management Expenses	1.25% p.a. In our valuation, this expense has been allowed for by reducing both the investment return and the crediting rate.												
Crediting Rate	<p>From 1 July 2011, the crediting rate applied to Defined Benefit or Accelerated Benefit accounts changed from a three year smoothed rate to an annual unsmoothed rate.</p> <p>Therefore based on the investment return scenarios noted above, and after deducting the fund management expenses noted above, the assumed crediting rates are:</p> <table><tr><th>Scenario</th><th>2014/15 to 2018/19</th><th>2019/20 & later</th></tr><tr><td>Unfavourable</td><td>3.75%</td><td>5.75%</td></tr><tr><td>Medium</td><td>5.75%</td><td>5.75%</td></tr><tr><td>Favourable</td><td>7.75%</td><td>5.75%</td></tr></table>	Scenario	2014/15 to 2018/19	2019/20 & later	Unfavourable	3.75%	5.75%	Medium	5.75%	5.75%	Favourable	7.75%	5.75%
Scenario	2014/15 to 2018/19	2019/20 & later											
Unfavourable	3.75%	5.75%											
Medium	5.75%	5.75%											
Favourable	7.75%	5.75%											
Asset Valuation	Market values as provided by the Scheme administrators.												

10.1 Taxation:

Investment returns are assumed to be net of investment fees and investment tax. The contribution tax rate is assumed to be 15% of deductible contributions.

10.2 Decrement Rates:

A summary of the decrements rates assumed in the investigation is set out in table 7.

Table 8. Summary of decrements rates assumed

Expected Number of Exits p.a per 100,000 Members				
Age	Death	Disablement	Withdrawal	Retirement
20	184	12	16,300	-
25	101	12	12,800	-
30	104	23	9,900	-
35	120	35	7,500	-
40	175	58	7,000	-
45	276	138	4,700	-
50	477	311	2,800	-
55	859	681	-	7,500
56	966	795	-	5,800
57	1,085	910	-	6,100
58	1,214	1,061	-	6,900
59	1,351	1,222	-	7,800
60	1,501	1,407	-	12,000
61	1,662	1,614	-	25,000
62	1,852	1,891	-	12,000
63	2,053	2,212	-	18,000
64	2,268	2,569	-	35,000
65	-	-	-	100,000

11. Summary of actuary's report for the purposes of Australian accounting standard AAS25

11.1 Quadrant Defined Benefits Fund

We have prepared this statement for the purposes of Australian Accounting Standard AAS25 relating to superannuation funds reporting, at the request of the Trustee of the Quadrant Superannuation Scheme ('the Scheme').

11.2 Applicable Fund

The statement is provided in respect of the Quadrant Defined Benefits Fund ('the Fund') which is a sub-fund of the Scheme.

11.3 Purpose

The purposes of this statement are:

- To provide the Trustee with a summary of our report on the most recent actuarial investigation of the Fund so that the Trustee can fulfil the requirements of paragraphs 63 and 64 of AAS25.
- To specify the value of paragraphs 63 and 64 of AAS25 investigation is set out tax Benefit accordance with AAS25, and to describe the basis on which that value has been determined.

11.4 Effective Date

The effective date of this statement is 30 June 2014.

11.5 Summary Report

The summary of the actuarial report is provided in Addendum 1 to this statement.

11.6 Value of Accrued Benefits

Paragraph 50 of AAS25 states that:

"Accrued Benefits" of a defined benefit fund shall be measured ... using actuarial assumptions and valuations where appropriate, as the present value of expected future payments arising from membership of the plan up to the measurement date. The present value of expected future benefit payments shall be determined by discounting the gross benefit payments at a current, market determined, risk-adjusted discount rate appropriate to the plan".

The methods used for attributing benefits to membership of the Fund up to the Effective Date are set out in Addendum 2.

The assumptions used to determine the value of the Accrued Benefits are summarised in Addendum 2. These assumptions are the similar to those adopted for the previous actuarial review of the Fund as at 30 June 2011.

The weighted average term of the liabilities at the effective date was 6.8 years. The value of Accrued Benefits at the effective date was as follows:

Table 9. Value of accrued benefits at 30 June 2014

	Value of Accrued Benefits as at 30/06/2014
Present Value of Defined Benefits	\$49,935
Accumulation Benefits	\$8,158
Accrued Benefits (minimum of Vested Benefits if applicable)	\$58,093

11.6.1 Compliance

The amount of Accrued Benefits shown in table 8 has been calculated. This statement and the attached summary report have been prepared in a manner consistent with Professional Standards and Guidance Notes issued by the Institute of Actuaries of Australia.



GEOFF MCRAE, B.Sc. FIAA
Rice Warner Actuaries

17 March 2015

Rice Warner
Level 1, 2 Martin Place
Sydney NSW 2000

Addendum 1 - summary of actuarial report

The effective date of the most recent review of the Fund was 30 June 2014 and covered the three year period to that date. The review was undertaken by Geoff McRae, Fellow of the Institute of Actuaries of Australia, of Rice Warner, and the results of the review are set out in a report dated 7 January 2015.

A summary of this report is as follows:

- As at 30 June 2014, the net realisable value of the assets of the Fund, as determined by the Scheme Trustee, amounted to approximately \$66,310,000. This is also the value of assets used in determining the recommended contribution rate.
- The Fund has no liability in respect of postponed retirements or deferred benefits for former members or dependants.
- The present value of accrued benefits as at 30 June 2014 for the purpose of Australian Accounting Standard AAS25 was approximately \$58,093,000. This amount also constitutes the 'value of the liabilities in respect of accrued benefits' as defined in Division 9.5 of the Superannuation Industry Supervision (SIS) Regulations. A summary of the method and assumptions used to determine this value is set out below. The above figure includes accumulation liabilities of approximately \$8,158,000.
- The total as at 30 June 2014 of members' vested benefits for the purpose of Australian Accounting Standard AAS25 (i.e. voluntary resignation benefits, or early retirement benefits if eligible as of right), amounted to \$57,475,000.
- At 30 June 2014, the present value of accrued benefits and vested benefits were both covered by the Fund's assets. The ratios of the assets to these totals are as follows:

- Present value of accrued benefits	114%
- Vested benefits	115%
- The actuarial review was carried out using the Aggregate Funding method, supplemented by projecting the Fund's assets and total vested benefits on the basis of the actuarial assumptions made. Contribution rates were determined after considering the future levels of the vested benefit index arising from the payment of the contribution rates derived from the Aggregate Funding method. As a minimum, we required that the assets of the Fund be expected to exceed vested benefits at all times until 30 June 2017.
- The Actuary recommended that in future the Councils contribute 9.5% of salaries from 1 July 2015.
- The next actuarial review of the Fund is due as at 30 June 2017. At that time, the level of Council contributions will be reviewed again.

Addendum 2 - Actuarial assumptions and method used to determine the value of accrued benefits for AAS 25 purposes

Actuarial Assumptions

Economic Assumptions

Investment Return:	7.0% p.a. (net of investment expenses and taxes on investment earnings). After deducting the Fund management expenses noted below, the assumed investment return is 5.75% p.a.
Salary increases:	4.0% p.a. (including promotional increases).
Fund Management Expenses:	1.25% p.a. In our valuation, this expense has been allowed for by reducing both the investment return and the crediting rate.
Crediting Rate:	5.75% p.a. The crediting rate is net of allowance for the Fund management expenses noted above.

Leaving Service Rates

Assumptions regarding the rates at which members will leave the Fund on account of retirement, death, disablement and resignation have been revised at this actuarial investigation. These assumptions were based on the experience of the Fund and other similar funds within the Quadrant Superannuation Scheme. Further details can be found in the report on the actuarial review of the Fund as at 30 June 2014.

Method of Attributing Benefits to Past Membership

The methods used for attributing benefits to past membership are as follows

- Defined Benefits on Retirement: actual accrual approach (based on the member's accrued retirement multiple at the effective date and the member's salaries projected to the assumed date of retirement).
- Defined Benefits on Death and Disablement: proportionate approach (proportion of total projected benefit amount, in the ratio of membership of the Fund to the effective date divided by membership to the projected date of death/disablement).
- Resignation Benefits: based on contributions received up the effective date only, increased with interest to the projected date of payment of the benefit (as applicable), and using the vesting factor (if any) applicable at the projected date of resignation.

- Accumulation benefits: the accumulated balance in the accumulation account at the effective date.

Where the total vested benefits for all of the members in the Fund exceed the value of the Accrued Benefits determined using the above method, a minimum of the total vested benefits has been applied.

Appendix A Actuary's statement for the purposes of the superannuation - industry (supervision) regulations

A.1 Quadrant Defined Benefits Fund

We have conducted an actuarial review of the Quadrant Defined Benefits Fund ('the Fund') as at 30 June 2014. The review was based on 187 active members with annual superannuation salaries of approximately \$12,265,000. We have reviewed the data for reasonableness and we have no reason to believe the data used is not correct. In our opinion:

- The value of assets of the Fund was adequate to meet the liabilities of the Fund in respect of vested benefits as at 30 June 2014, with the result that the Fund was in a 'satisfactory financial position' as defined in the SIS Regulations.
- The value of the assets of the Fund was adequate to meet the value of the liabilities of the Fund in respect of the present value of accrued benefits as at 30 June 2014.
- Based on the assumptions used, and assuming the Employer contributes at the levels described below, the value of the assets will continue to be adequate to meet the value of the liabilities of the Fund in respect of vested benefits at all times during the period up to 30 June 2017. We therefore expect the Fund to remain in a 'satisfactory financial position' as defined in the SIS Regulations.

The Fund is used for Superannuation Guarantee purposes and is subject to the funding and solvency provisions of Division 9.3 of the SIS Regulations. All funding and solvency certificates required under Division 9.3 have been obtained for the period from the date of the last review to 30 June 2014 and we expect to be able to certify the solvency of the Fund in any funding and solvency certificate that may be required under the Regulations during the period from 1 July 2014 to the next actuarial review.

We recommend that in future the Councils contribute 9.5% of salaries from 1 July 2015.

In addition, Councils should contribute as required under awards or other agreements, until the results of the next actuarial review, due as at 30 June 2017, become available.



GEOFF MCRAE, B.Sc. FIAA
Rice Warner

17 March 2015

Rice Warner
Level 1, 2 Martin Place
Sydney NSW 2000

Attachment B

Actuarial Review of the
HCC Defined Benefits Fund

As at 30 June 2014

Prepared by:

GEOFF MCRAE, B.Sc.
Fellow of the Institute of Actuaries of Australia

17 March 2015

17 March 2015

Mr Wayne Davy
Chief Executive Officer
Quadrant Superannuation Scheme GPO
Box 863
HOBART TAS 7001

Dear Wayne,

HCC defined benefits fund actuarial review as at 30 June 2014

We have carried out an investigation into the HCC Defined Benefits Fund ('the Fund') using the member data and other information provided as at 30 June 2014 and set out the results of the review and our findings in this report.

For this review we have applied the Aggregate Funding method. This method determines a single contribution rate, for each sub-fund (or each benefit category within each sub-fund), which is the contribution rate required to fund the total benefits for existing employees, allowing for the assets actually held, but ignoring new entrants. It is calculated as the present value of all benefits expected to be payable to existing members, less the value of the assets held and the present value of future contributions by current members, divided by the present value of all future salaries of the existing members.

1. Executive Summary

The investigation was carried out as part of the full triennial investigation into the Quadrant Superannuation Scheme, as required under the Superannuation Industry (Supervision) Act 1993 and the associated Regulations. The main purpose of the investigation into the Fund is to review the rates of Employer contributions payable to the Fund.

The investigation of the HCC Defined Benefits Fund shows that:

- Strong investment returns over the past two years, allied with modest average rates of salary increase since 2011 have contributed to the strengthening financial position. This strengthening has been underpinned by the additional contributions being made by the Employers as part of the restoration plan.
- The value of Fund assets at 30 June 2014 was 7% higher than the total of members' vested benefits. That is, the Fund had a vested benefits index (VBI) of 107% (97% in 2011). Hence the Fund was in a 'satisfactory financial position' as at the date of this review.

- Earlier in 2014, we recommended that the planned additional contributions in the restoration plan be discontinued from 1 July 2014. At the current rate of Council contributions (9.5% of salary for HCC and 12% for TasWater), the VBI (in respect of defined benefits only) is projected to remain relatively stable in the short term. The projections suggest that if an investment return of 7% pa is maintained thereafter, the VBI will strengthen from year seven onwards. However, given the current state of world investment markets, there is a realistic risk of a market downturn over the next five years.
- Lower investment returns that are on average 5% pa over the next five years may lead to the VBI falling below 100%. Conversely, investment returns higher than 7% could lead to a further strengthening of the VBI.
- Separate projections of the expected future VBI have been carried out for each of the TasWater section of the Fund and the HCC section. Based on these results TasWater could consider a reduction in their employer contribution rates. Given the current level of world investment markets, it would be prudent to adopt the following employer contribution rates:
 - for HCC either
 - > Option A. 11% of salary from 1/7/2015
 - > Option B. 9.5% of salary from 1/7/2015, subject to review each year.
 - for TasWater, reduce the current contribution rate to 11% of salary from 1/7/2015.
- We expect the Fund to remain in a 'satisfactory financial position' from 1 July 2014 to 30 June 2017 (with assets above vested benefits).

1.1 Recommendations

Given the current level of world investment markets, we recommend the adoption of the following employer contribution rates:

- for HCC, either
 - Option A. 11% of salary from 1/7/2015; or
 - Option B. 9.5% of salary from 1/7/2015, subject to review each year.
- for TasWater, reduce the current contribution rate to 11% of salary from 1 July 2015.

The employers should also contribute the amount of any contributions required under awards or other employment agreements.

Noting that the future financial position of the Fund may vary from the projected levels (for example as a result of higher or lower investment returns), we also recommend that the Trustee continues its recent practice of briefly reviewing the recommended contribution rates after 30 June each year, to confirm they remain appropriate. If the Fund's financial position is stronger than expected, it may be appropriate for the employers to pay lower contributions than those recommended above, while if the financial position significantly weakens it may be necessary to pay higher contributions.

2. Introduction

2.1 General

The purpose of this report is to present the results of the actuarial review of the HCC Defined Benefits Fund ('the Fund') as at 30 June 2014. The Fund is a sub-fund of the Quadrant Superannuation Scheme (the Scheme).

This report is provided for the Trustee of the Scheme. We understand that other recipients of this report will be the Hobart City Council and TasWater (Southern Water before 1 July 2013). Where this report is provided to third parties, it should be provided in its entirety. The review of the Fund is part of a full actuarial review of the Scheme in accordance with the Trust Deed of the Scheme and meets the requirements of the Superannuation Industry (Supervision) Act 1993 and the associated Regulations, which require actuarial investigations to be carried out at least once every three years.

We have prepared this report in accordance with Professional Standard No. 400 of the Institute of Actuaries of Australia relating to the actuarial review of defined benefit superannuation funds. We have also considered the requirements of Prudential Standard SPS 160 Defined Benefit Matters.

2.2 Governing Rules and Structure of Fund

The Scheme is a resident regulated fund and a complying fund for the purposes of the Superannuation Industry (Supervision) Act 1993. Provided it continues to comply with the relevant legislation, the Scheme is eligible for concessional tax treatment.

The Fund is a defined benefit sub-fund of the Scheme and provides lump sum benefits to members. The Fund is closed to new members.

A summary of the Fund's main benefit provisions is set out in Appendix A (Benefit Summary) of this report. For full details of the Fund's benefits, reference should be made to the Scheme's Trust Deed and the Fund's governing rules.

2.3 Name and Capacity of Actuary

This review has been undertaken by Geoff McRae, B.Sc., Fellow of the Institute of Actuaries of Australia, in his capacity as an employee of Rice Warner.

2.4 Previous Report

The previous actuarial review of the Fund as at 30 June 2011 was carried out by Geoff Morley, B.Sc. B.Com. FIAA, of Bendzulla Actuarial Pty Ltd, and was dated 17 April 2012.

That report showed that the Fund was in an 'unsatisfactory financial position' with the assets less than the total of members' vested benefits at that date.

The Employers were recommended to contribute, as follows:

Table 1. Hobart City Council

Year	Contributions as a percentage of salary	Lump Sum Contributions	Contributions as a percentage of benefit payments
2011/12	13.0%	\$1,200,000	-
2012/13	13.0%	\$750,000	7%
2013/14	13.0%	\$750,000	7%
2014/15	9.5%	\$750,000	7%

Table 2. Southern Water

Year	Contributions as a percentage of salary	Lump Sum Contributions
2011/1	13.0%	\$440,000
2012/1	13.0%	
2013/1	13.0%	
2014/1	12.0%	

In addition, both the Employers also contributed the amount of any contributions required under awards or other employment agreements, and forwarded contributions made by members.

2.5 Significant Events since the Previous Review

Southern Water became part of TasWater from 1 July 2013.

We are not aware of any other significant events that have occurred between 30 June 2011 and 30 June 2014, or since 30 June 2014, that we have not already taken into account, which would have a material impact on the recommendations in this report.

2.6 Purpose of Review

The purposes of this actuarial review are to:

- assess the financial position of the Fund
- recommend an appropriate level of Employer contributions for the future
- satisfy the requirements of the Trust Deed
- meet the legislative requirements.

3. Fund experience

3.1 Data Provided

The Scheme administrators provided us with the following information:

- membership details for the Fund as at 30 June 2014
- salary histories of members for the past four annual review dates
- details of Assets for each sub-fund as at 30 June 2014
- information about investment returns after 1 July 2014.

A summary of the defined benefit membership data at the current and previous investigations is set out in table 3.

Table 3. Summary of the defined benefit membership

	30/06/2014		30/06/2011	
Category	Number	Salaries	Number	Salaries
A	133	\$9,576,345	160	\$10,345,992
B	2	\$171,375	2	\$151,511
C	1	\$76,345	3	\$280,152
D	10	\$680,351	11	\$641,138
E	60	\$3,384,098	79	\$3,950,591
Defined Benefit	206	\$13,888,514	255	\$15,369,384

The number of members has reduced by 49 (about 19%) over the three years since the last review.

Graph 1 shows the numbers of defined benefit members in the different age bands at 30 June 2014.

Graph 1. Number of members by age bands.

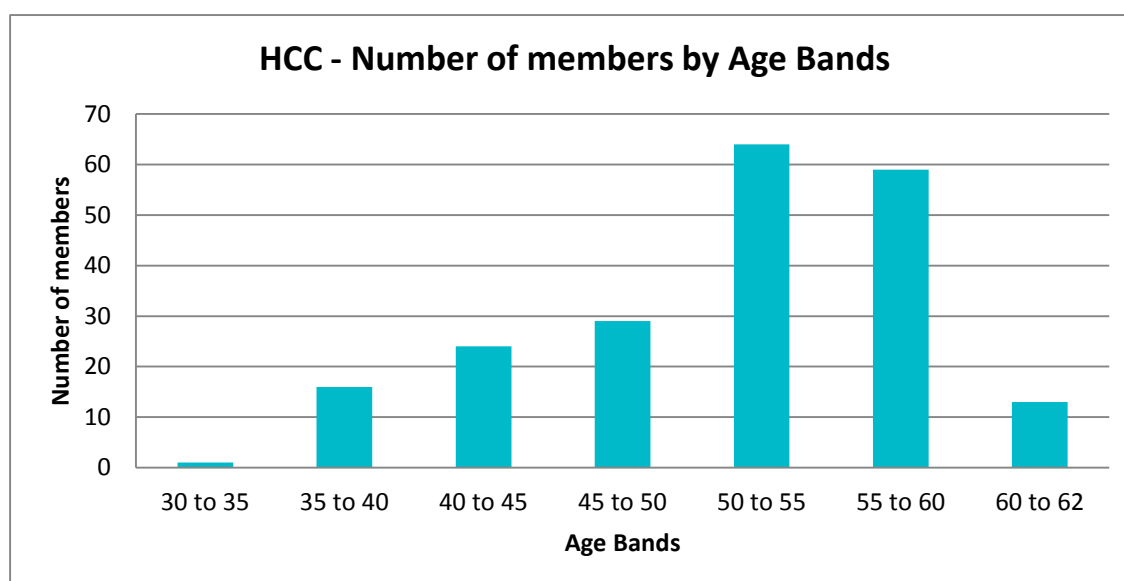


Table 4 shows average age and membership statistics of defined benefit members by membership category at the current and previous actuarial review dates.

Table 4. Average age and membership statistics of defined benefit members

	30/06/2014		30/06/2011	
Category	Average Age (years)	Average Membership (years)	Average Age (years)	Average Membership (years)
A	50.4	18.4	49.2	16.0
B	54.5	38.3	52.2	35.3
C	60.0	41.9	58.7	39.6
D	49.4	16.8	48.1	13.7
E	52.0	24.9	51.1	23.7
Defined Benefit	50.9	20.5	49.9	18.7

The data shows that:

- The average age of the members at 30 June 2014 was 50.9 years, an increase of about 1 year on the average age three years previously.
- About 35% of the members were aged 55 or over at 30 June 2014 and were therefore immediately eligible for retirement benefits.
- A further 31% of the members were between the ages of 50 and 55.
- There was only 1 member under 35.

The Fund has a mature age profile and is likely to reduce in size over the next few years.

3.2 Assets

The market value of the net assets of the consolidated HCC Fund as at 30 June 2014 was provided by Scheme personnel and was equal to approximately \$49,698,000. We have taken this amount to be the value of assets available to support the Fund's liabilities. The amount of the net assets was approximately \$44,901,000 in respect of HCC employees and approximately \$4,797,000 in respect of TasWater employees.

The Fund is invested in a range of asset classes in accordance with the Trustee's investment policy for the assets supporting defined benefit liabilities, with a target weighting of about 70% to growth assets (such as shares and property) and 30% to defensive assets (such as fixed interest and cash). We consider that this allocation is within the range of alternatives suitable to support the liabilities of the Fund. We, however, recommend that the specific asset allocations be kept under review because of the age profile of the Fund.

3.3 Investment Returns

The average return on the Fund's assets over the three years to 30 June 2014 was 9.8% pa (net of investment management expenses and tax, but before deduction of Fund management expenses). This was greater than the return of 7% pa assumed in the previous actuarial review and has therefore had a positive impact on the financial position of the Fund as at 30 June 2014, compared to that projected in the 2011 investigation.

The investment return for the period from 30 June 2014 up to 31 December 2014 was 3.8% (7.6% pa); this is higher than the 7% pa adopted in our review assumptions. This is expected to have a positive impact on the Fund's financial position.

3.4 Salary Increases

Members who remained in the Fund over the three year period since the last investigation experienced average salary increases of 3.9% pa compared with the 4.0% pa assumed in the 2011 actuarial review.

The slightly lower than expected salary increases have had a slight positive impact on the financial position of the.

Average salary increases were 3.9% pa and 4.3% pa for Hobart City Council and TasWater employees respectively.

3.5 Expenses

The Total Fee for the 2013/2014 financial year was equal to 1.21% pa. This comprised 0.30% of Reserve Fee, 0.05% of Asset Consultant Fee, 0.06% of Custodian Fee and 0.80% of Administration Fee. An allowance for expenses at 1.25% pa is assumed, the same as that used in the previous review. These charges are also deducted off the crediting rates applied to members' benefits.

We have therefore allowed for a deduction (from both the Fund's investment return and the crediting rate applied to members) at the above rates in all future years.

3.6 Interest Crediting Rate

From 1 July 2011, the crediting rate applied to Defined Benefit or Accelerated Benefit accounts changed from a three year smoothed rate to an annual unsmoothed rate. The crediting rate is now based on the investment return on the fund's assets, adjusted for fees and taxes in accordance with the crediting rate policy adopted by the Trustee. Therefore, the interest rate credited each year will closely reflect the investment return in that same year. This removes one source of fluctuation in the Fund's future financial position, because movements in the parts of members' benefits that are linked the crediting rates will be more closely aligned to movements in the Fund's asset values.

4. Financial position

4.1 Measures of Solvency

There are a number of ways to measure the financial position of the Fund at the review date. We have adopted the following measures which are compared to the value of the Fund's assets:

- Vested Benefits: the benefits to which members would have been entitled had they voluntarily left service as at 30 June 2014.
- Accrued Retirement Benefits: Members' Accrued Retirement Benefits have been calculated as:

$$\begin{array}{ccc} \text{Accrued Benefit Multiple} & & \text{Final Average Salary at} \\ \text{at the valuation date} & \text{times} & \text{the valuation date} \\ & \text{plus} & \\ & \text{the member's additional accumulation accounts.} & \end{array}$$

The ARB is also subject to a minimum of the vested benefit.

- Past Service Liabilities: The present value of that part of members' future expected benefit entitlements which have accrued up to 30 June 2014. This figure is an actuarial estimate, and represents our best estimate of the accrued liabilities of the Fund as at 30 June 2014. The additional accumulation accounts are included at their face values as at 30 June 2014.
- Minimum Requisite Benefits (MRBs): the minimum benefit required to be made available to employees in order that the Employers satisfy their superannuation guarantee obligations. If the assets fall below this figure, the Fund is regarded as 'technically insolvent'.

In each case, we have calculated an index by dividing the value of assets by the total of the relevant measure for all members. We have included the value of members' accumulation accounts in the liability measures.

Table 5 shows the indices at the current review.

Table 5. Indices at current review

HCC Consolidated	30/06/2014 Assets = \$49,698,000		30/06/2011 Assets = \$40,799,873	
Measure	Total of Measure (\$'000)	Index (%)	Total of Measure (\$'000)	Index (%)
Vested Benefits	46,288	107	41,982	97
Accrued Retirement Benefits	52,830	94	50,997	80
Past Service Liabilities	46,963	106	48,214	85
MRBs	34,116	146	29,814	137

The above ratios show that the consolidated Fund's financial position has improved since the previous review date. Strong investment returns over the past 2 years, allied with modest average rates of salary increase since 2011 have contributed to the strengthening financial position. This strengthening has been underpinned by the additional contributions being made by the Employers as part of the restoration plan.

Our comments on the individual indices are:

- The Vested Benefits Index of 107% at 30 June 2014 indicates that the Fund was in a 'satisfactory financial position' as is defined in the SIS Regulations.
- The fact that the coverage of assets over past service liabilities is at 106% indicates a sound level of funding at the valuation date.
- The minimum requisite benefits (MRB's) were very well funded as at 30 June 2014 and it is very likely that the MRB's will continue to be covered the Fund's assets.
- It should be noted that the investment return for the period from 30 June 2014 up to 31 December 2014 was 3.8% (7.6% pa). This is higher than the 7% pa adopted in our review assumptions. This is expected to have a positive impact on the Fund's financial position.

Table 6 shows the indices in respect of each participating employer.

Table 6. Indices in respect of each participating employer.

Employer:	HCC 30/06/2014 Assets = \$44,901,000		TasWater 30/06/2014 Assets = \$4,797,000	
Measure	Total of Measure (\$'000)	Index (%)	Total of Measure (\$)	Index (%)
Vested Benefits	42,169	106	4,119	116
Accrued Retirement Benefits	48,068	93	4,762	101
Past Service Liabilities	42,815	105	4,148	116

Employer:	HCC 30/06/2014 Assets = \$44,901,000		TasWater 30/06/2014 Assets = \$4,797,000	
Measure	Total of Measure (\$'000)	Index (%)	Total of Measure (\$)	Index (%)
MRBs	31,063	145	3,053	157

4.2 Measures excluding Accumulation Accounts

Accumulation benefits are usually treated as being fully vested in the members and hence should be regarded as fully funded already. When considering the position of the Fund, it is instructive to reduce the value of the assets for any accumulation benefits, and compare this figure to the liabilities in respect of the defined benefits only.

The funding indices excluding accumulation accounts at 30 June 2014 are shown in table 7.

Table 7. Funding indices excluding accumulation accounts

Measure	Consolidated Index (%)	HCC Sub Fund Index (%)	TasWater Sub Fund Index (%)
Vested Benefits	108	107	118
Accrued Retirement Benefits	94	93	101
Past Service Liabilities	106	105	117
MRBs	152	151	162

4.3 Insurance Position

The Fund is protected against adverse death and disablement experience by means of group life insurance arrangements covering the lump sum death and permanent disability (TPD) risks.

Table 8 compares the Fund's asset value and the sums insured as at 30 June 2014 to the total lump sum death benefits. It shows that the Fund's insurance arrangements are slightly more than sufficient to cover the total death and TPD benefits.

Table 8. Comparison of Fund's asset value and sums insured

HCC Defined Benefit Fund	Death Benefits (\$'000)	TPD Benefits (\$'000)
Consolidated		
Value of Assets	49,698	49,698
Sums Insured	27,763	27,763
Total Assets plus insurance	77,461	77,461
Total Death and TPD Benefits	77,421	77,421
Excess/ (Shortfall)	40	40
Excess as % Total Death/TPD Benefits	0.1%	0.1%

For a defined benefit fund, it is normal that the value of the assets plus the value of the sums insured does not exactly equal the total death and TPD benefits. There will generally be a small excess or shortfall, which varies in line with movements in the Fund's assets. In our view, the excess above is not unreasonable in this context.

4.4 Retrenchment Benefits

Fund benefits are also payable to members on retrenchment from the Employer's service. The retrenchment benefit is defined in the Trust Deed as the member's early retirement benefit. There are slight differences of terminology for certain category A and E members.

The accrued retirement benefit can be used to measure the ability of the Fund to provide for members' retrenchment benefits. The calculation above shows that if all of the members had been retrenched at 30 June 2014, the assets would not have been sufficient to cover the benefits, if the maximum retrenchment benefit were to be paid to each member.

5. Funding the benefits

5.1 General Comments

Over the life of the Fund, the ultimate cost to the Employers of providing the benefits will be equal to:

- the amount of benefits paid out
- the expenses of running the Fund including tax
- members' contributions; and the return on investments.

Since the benefits are linked to members' salaries, the cost of providing the benefits will depend on the Fund's experience in relation to:

- economic factors such as the investment return obtained on the Fund's assets and the rates at which the salaries increase
- factors influencing membership turnover such as mortality and disability, resignation and retirement.

The valuation process involves making assumptions about the likely levels of the above factors in the future. Using these assumptions, we can project the expected future cash flows and benefits for the current members of the Fund. By discounting these cash flows, we derive a present value for the liabilities which we can compare to the value of the current assets.

The ultimate cost to the Employers will not depend on the actuarial assumptions or methods used to project the cash flows and benefits, but on the actual experience of the Fund. The financing method and the actuarial assumptions will however affect the timing of the cost to the Employers.

5.2 Financing Method

There are various financing methods that can be used to determine the Councils' contributions that should be paid over time. The funding method adopted in this review is different from the method used at the previous review (target funding method). This review uses the aggregate funding method to determine the contribution rate adjusted for surplus and the Employer cost for future service, which equal to, 8.2% pa and 11.3% pa respectively for HCC, and 2.4% pa and 11.4% pa respectively for TasWater.

The contribution rate adjusted for surplus indicates the level of contribution required when surplus assets are taken into account and assumptions on which the calculations are based are as expected. If the future investment returns are lower than expected, the surplus will be depleted and this level of contribution will not be sufficient. Therefore, this contribution rate is used as a lower bound for determining the recommended contribution rate.

The Employer cost for future service does not take into account any surplus that has accumulated. It gives an indication of the level of contribution required when there is no surplus. This is a more prudent measure and it also normally sets the upper bound for determining the recommended contribution rate.

Nevertheless, the stability of the Councils' contributions over time will depend on how closely the Fund's actual experience matches the expected experience. If the actual experience differs from that expected, the Councils' contribution rate may need to be adjusted accordingly to ensure the Fund remains on course towards its target of financing members' benefits.

5.3 Assumptions

Taking into account the long-term experience of superannuation funds with investment strategies that are similar to that adopted for this Fund, we have adopted a long-term assumption of 7.0% pa for investment returns (net of investment expenses and taxes on investment earnings, but before deduction of the Fund management expenses).

However, to assess the sensitivity of the results to alternative investment market conditions, in the short term we have considered the three alternative scenarios in table 9.

Table 9. Alternative scenarios

Scenario	2014/15 to 2018/19	2019/20 & later
Unfavourable	5.00% pa	7.00% pa
Medium	7.00% pa	7.00% pa
Favourable	9.00% pa	7.00% pa

We have assumed salary increases of 4.0% pa, inclusive of promotional increases.

The long-term investment return assumption and the salary growth assumption are the same as those adopted for the 2011 actuarial review and maintain the assumed real rate of return assumption at 3.0% p.a. (before expenses). The investment return for the period from 30 June 2014 up 31 December 2014 was 3.8% (7.6% pa). This is higher than the 7% pa adopted in our review assumptions. This is expected to have a positive impact on the Fund's financial position.

In addition, the unfavourable and favourable scenarios have been selected to illustrate the impact of a period of under or over performance of the Fund's investments, relative to the medium scenario. The unfavourable scenario assumes underperformance of 2% pa from 1 July 2014 up to 30 June 2019, while the favourable scenario assumes over performance of 2% pa from 1 July 2014 up to 30 June 2019.

From 1 July 2011, the crediting rate applied to Defined Benefit or Accelerated Benefit accounts changed from a three year smoothed rate to an annual unsmoothed rate. Therefore we have assumed that after that date, the interest credited to members' accounts will be equal to the investment return (after adjustment for the administration fees borne by members).

For death and TPD, we have applied a decrement table similar to that used as at the previous review. The other decrement rates used in this review are the same as the ones used in the previous review as at 30 June 2011.

Appendix B (Summary of valuation basis) sets out the valuation basis in more detail.

6. Employer contributions

6.1 Projections of Funding Indices

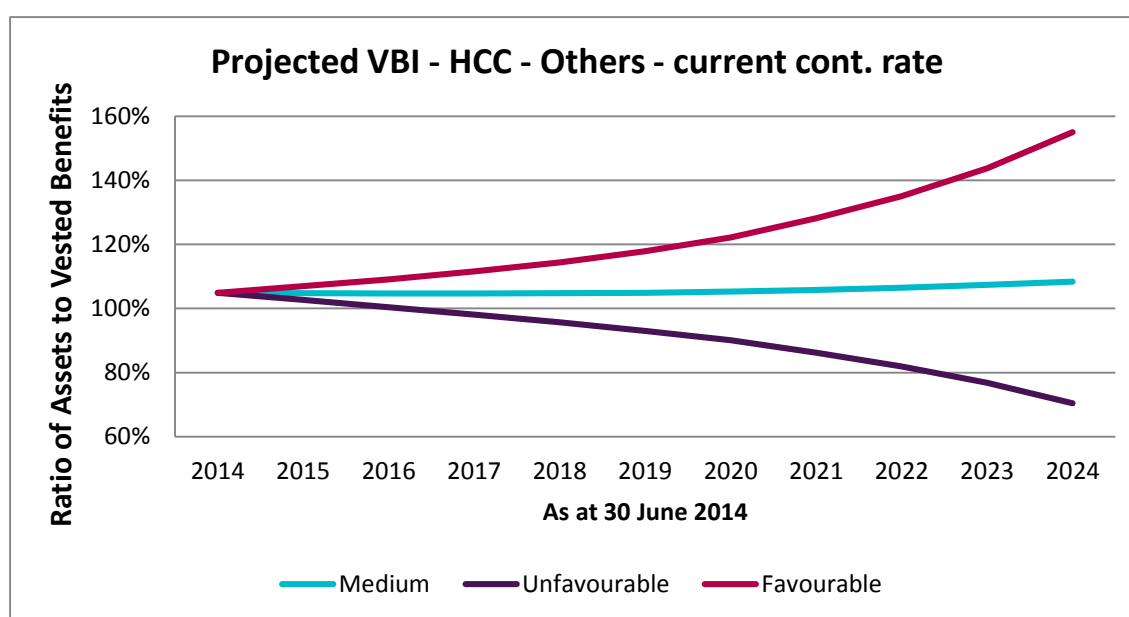
For this review, we have projected the VBI in respect of Hobart City Council members separately from the VBI of TasWater members. This approach is possible because the Scheme's administrator has been recording two separate asset sub-pools, one in respect of Hobart City Council and one in respect of TasWater, since the relevant employees were transferred on 1 July 2009.

By taking this approach, we can use the VBI projections to develop separate contribution recommendations for each Employer, reflecting their own experience. This approach minimizes cross-subsidies between Employers.

6.2 Hobart City Council

Graph 2 shows the VBI projection for the fund under three different investment return scenarios by the current contribution rate of 9.5% of salaries.

Graph 2. VBI projection for the fund under three different investment return scenarios by the current contribution rate of 9.5%



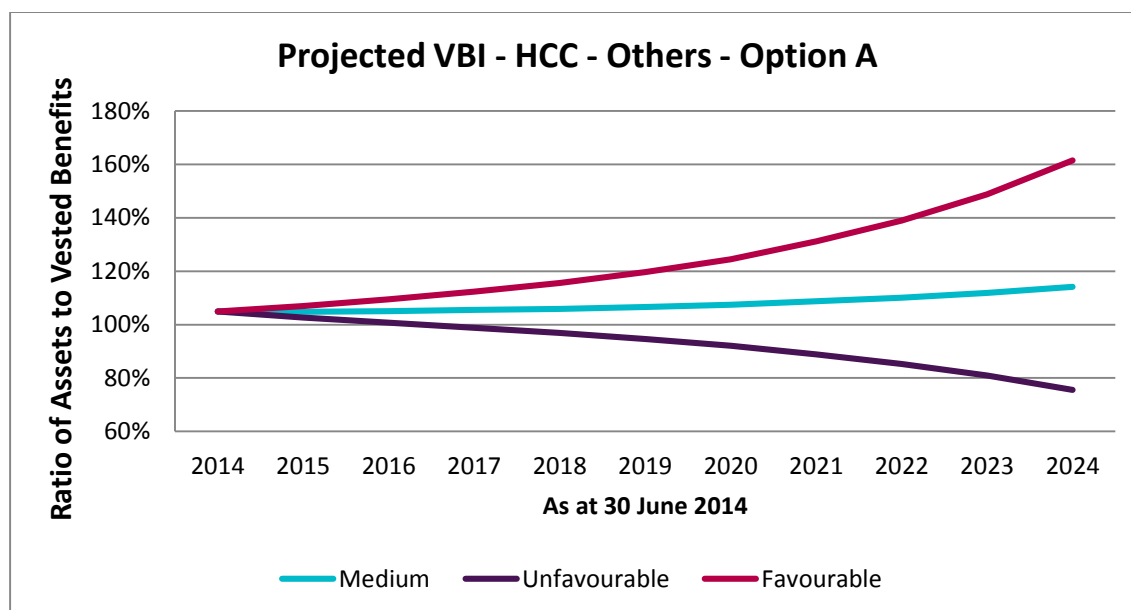
The projected VBI is clearly sensitive to the investment returns achieved. Under the medium return scenario of 7% pa, the VBI remains flat for a number of years then slightly strengthens in later years. Lower investment returns that are on average 5% pa over the next five years will lead to the VBI falling below 100%. Conversely, higher investment returns lead to a strengthening of the VBI.

Given the current level of world investment market and the age profile of the membership, it would be prudent to adopt the following employer contribution rates:

- > Option A. 11% of salary from 1 July 2015
- > Option B. 9.5% of salary from 1 July 2015, subject to review each year.

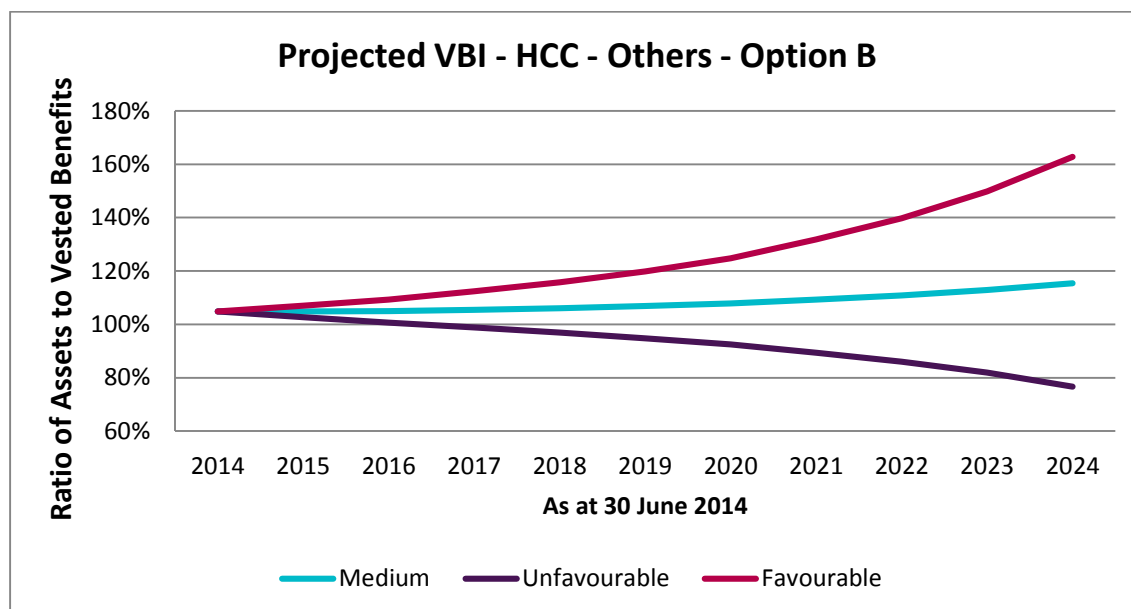
Graph 3 shows the VBI projection for the Fund if Option A is adopted.

Graph 3. VBI projection for the Fund if Option A is adopted



Graph 4 shows the VBI projection for the Fund if Option B is adopted.

Graph 4. VBI projection for the Fund if Option B is adopted.

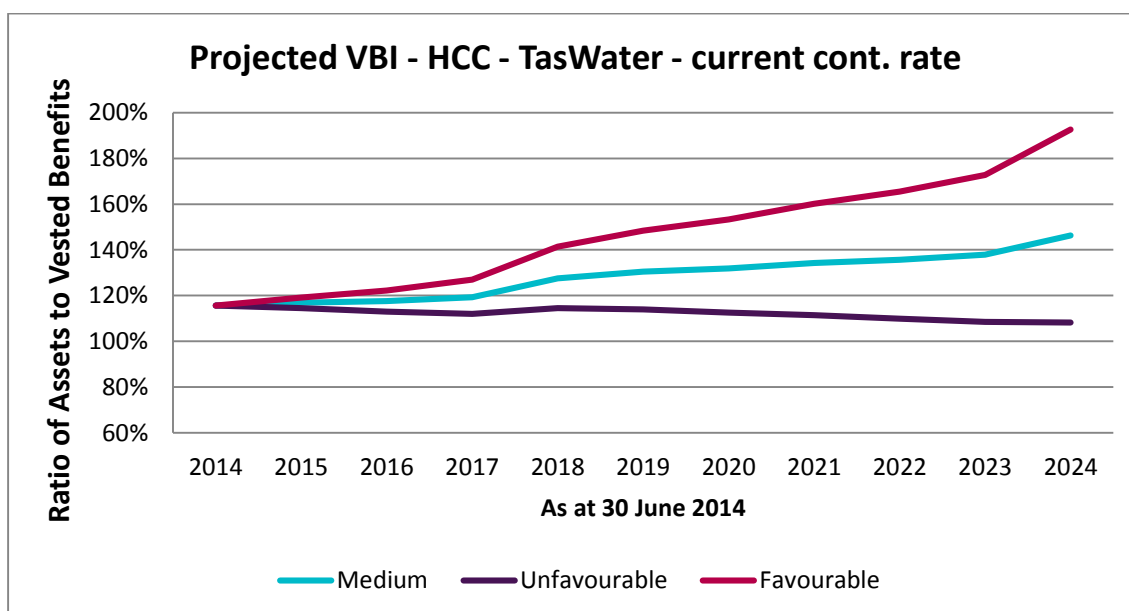


Both options show very similar projection results until the next actuarial review. The employer may adopt either option. The projected VBI is sensitive to the investment return assumed. Under the medium return scenario of 7% pa, the VBI remains flat for a number of years and then slightly strengthen in later years. Lower investment returns that are on average 5% pa over the next five years will lead to the VBI falling below 100%. Conversely, higher investment returns lead to a strengthening of the VBI. Either option provides stronger projected VBI results than the current employer contribution rate.

6.3 TasWater

The following chart shows the VBI projection for the fund under three different investment return scenarios by the current contribution rate of 12.0% of salaries.

Graph 5. VBI projection for the fund under three different investment return scenarios by the current contribution rate of 12.0%

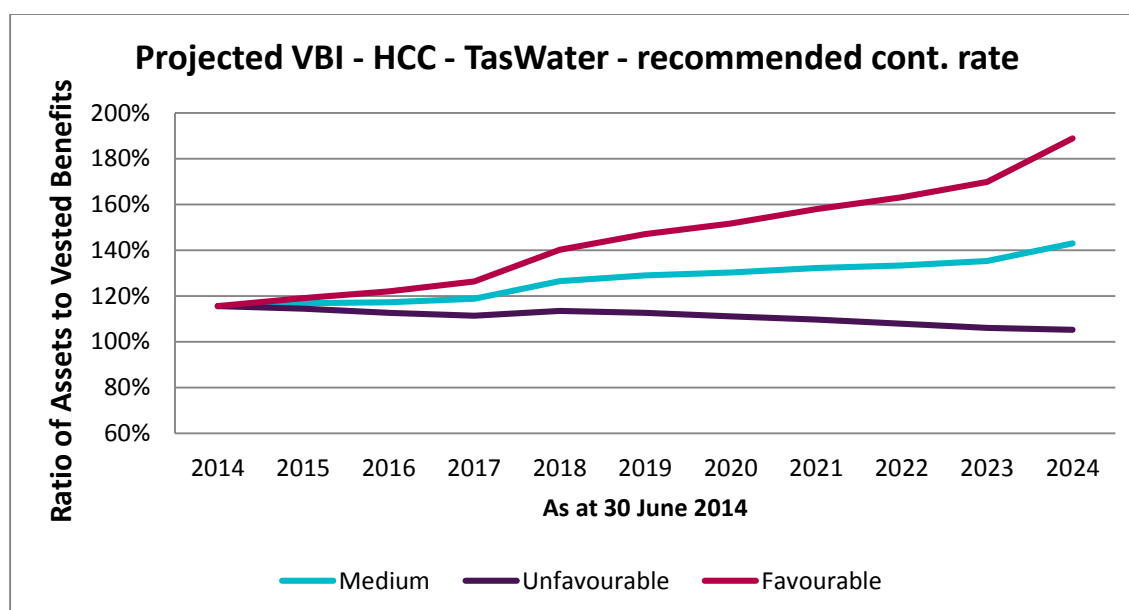


The projected VBI is sensitive to the investment return assumed. Under the medium return scenario of 7% pa, the VBI remains flat for a few years and then strengthen in later years. Lower investment returns that are on average 5% pa over the next five years will not lead to the VBI falling below 100%. Conversely, higher investment returns lead to a significant strengthening of the VBI.

The results suggest that employer could reduce the current contribution rate from 1 July 2015.

Graph 6 shows the VBI projection for TasWater if the recommended contribution rate is adopted.

Graph 6. VBI projection for TasWater if the recommended contribution rate is adopted.



Under the recommended contribution arrangement, the projected VBI results are slightly reduced from those achieved if the current contribution rate is continued.

6.4 Recommended Employer Contributions

Given, the current level of world investment markets, we recommend the adoption of the following employer contribution rates:

- for HCC, either
 - Option A. 11% of salary from 1/7/2015
 - Option B. 9.5% of salary from 1/7/2015, subject to review each year.
- for TasWater, reduce the current contribution rate to 11% of salary from 1 July 2015.

The employers should also contribute the amount of any contributions required under awards or other employment agreements.

Noting that the future financial position of the Fund may vary from the projected levels (for example as a result of higher or lower investment returns), we also recommend that the Trustee continues its recent practice of briefly reviewing the recommended contribution rates after 30 June each year, to confirm they remain appropriate. If the Fund's financial position is stronger than expected, it may be appropriate for the employers to pay lower contributions than those recommended above, while if the financial position significantly weakens it may be necessary to pay higher contributions.

6.5 Next Actuarial Investigation

A formal review of the Employers contributions will be required with the next full actuarial investigation into the Scheme as at 30 June 2017, as required under the superannuation law.

Yours sincerely,



GEOFF MCRAE, B.Sc.

Fellow of the Institute of Actuaries of Australia
Rice Warner

Appendix A Benefit summary

A.1 Categories

The member contribution levels and rates of accrual for the different membership categories are shown in table 10.

Table 10.

Category	Member Contributions (%)	Accrual Rate
A	6	<ul style="list-style-type: none"> 15.0% to 30 November 1982 17.5% from 1 December 1982
B	6	<ul style="list-style-type: none"> 20.0% to 30 November 1982 23.3% from 1 December 1982
C	6	<ul style="list-style-type: none"> 30.0% to 30 November 1982 35.0% from 1 December 1982
E	6	<ul style="list-style-type: none"> 15.0% to 30 June 1986 17.5% from 1 July 1986

Category D members contribute 6% of salary for an accrual rate of 17.5% of final average salary, adjusted according to the member's hours of part-time work.

A maximum multiple of seven times final average salary applies.

A.2 Retirement after age 55

$$\text{Benefit} = \text{Accrual Rate} \times \text{Final Average Salary} \times \text{Period of Membership}$$

Any rollover, additional contributions and surcharge accounts are payable in addition.

Where the Leaving Service benefit below exceeds the retirement benefit, we have assumed that the Leaving Service benefit will be paid

A.3 Leaving Service before age 55

The leaving service benefit is calculated according to the following:

- The contributions made by or deemed to have been made by the Member together with interest at such a rate as the Trustee determines to be appropriate.

- 10% of the amount calculated in (a) for each year of Service as a member subject to a minimum of 35% and a maximum of 100%.
- Any additional contributions made by or for the member.
- In respect of a Member who has completed at least 15 years' continuous service with the Employer:
 - a percentage (based on the following table of the excess, if any, of the Member's retirement benefit (excluding additional contributions) at the date of exit multiplied by v^n over the sum of (a) and (b), where n is the number of years and complete months from the date of the member leaving service to the Member's Normal Retirement Date and v is $(1.03)^{-\frac{1}{12}}$.

Complete Years of Service with the Employer	Percentage
Less than 15	Nil
15 or more but less than 18	10
18 or more but less than 21	20
21 or more but less than 24	40
24 or more but less than 27	60
27 or more but less than 30	80
30 or more	100

A.4 Death and Total and Permanent Disablement

The benefit that would have been payable on retirement assuming that the Member remained in Service and that the Member's salary remained unchanged until age 62.

A.5 Superannuation Guarantee

All benefits are subject to a minimum benefit to ensure compliance with the Superannuation Guarantee legislation.

Appendix B Summary of valuation basis

Method	Aggregate funding												
Economic Assumptions													
Investment Return	<p>A long-term assumption of 7.0% pa (net of investment expenses and taxes on investment earnings, but before deduction of Fund management expense).</p> <p>However, to assess the sensitivity of the results to alternative investment market conditions, in the short term we have assumed the three scenarios in the table below will apply.</p> <table><tr><th>Scenario</th><th>2014/15 to 2018/19</th><th>2019/20 & later</th></tr><tr><td>Unfavourable</td><td>5.00%</td><td>7.00%</td></tr><tr><td>Medium</td><td>7.00%</td><td>7.00%</td></tr><tr><td>Favourable</td><td>9.00%</td><td>7.00%</td></tr></table> <p>For purposes of the statements required in accordance with AAS25 (see appendix C), we have used the assumptions in the ‘medium’ scenario above.</p>	Scenario	2014/15 to 2018/19	2019/20 & later	Unfavourable	5.00%	7.00%	Medium	7.00%	7.00%	Favourable	9.00%	7.00%
Scenario	2014/15 to 2018/19	2019/20 & later											
Unfavourable	5.00%	7.00%											
Medium	7.00%	7.00%											
Favourable	9.00%	7.00%											
Salary Increase Rate	4.0% pa inclusive of promotional increases.												
Fund Management Expenses	1.25% pa. In our valuation, this expense has been allowed for by reducing both the investment return and the crediting rate.												
Crediting Rate	<p>From 1 July 2011, the crediting rate applied to Defined Benefit or Accelerated Benefit accounts changed from a three year smoothed rate to an annual unsmoothed rate.</p> <p>Therefore based on the investment return scenarios noted above, and after deducting the fund management expenses noted above, the assumed crediting rates are:</p> <table><tr><th>Scenario</th><th>2014/15 to 2018/19</th><th>2019/20 & later</th></tr><tr><td>Unfavourable</td><td>3.75%</td><td>5.75%</td></tr><tr><td>Medium</td><td>5.75%</td><td>5.75%</td></tr><tr><td>Favourable</td><td>7.75%</td><td>5.75%</td></tr></table>	Scenario	2014/15 to 2018/19	2019/20 & later	Unfavourable	3.75%	5.75%	Medium	5.75%	5.75%	Favourable	7.75%	5.75%
Scenario	2014/15 to 2018/19	2019/20 & later											
Unfavourable	3.75%	5.75%											
Medium	5.75%	5.75%											
Favourable	7.75%	5.75%											
Asset Valuation	Market values as provided by the Scheme administrators.												

B.1 Taxation:

Investment returns are assumed to be net of investment fees and investment tax. The contribution tax rate is assumed to be 15% of deductible contributions.

B.2 Decrement Rates:

A summary of the decrements rates assumed in the investigation is set out in table 11.

Table 11. Summary of the decrements rates

Expected Number of Exits pa per 100,000 Members				
Age	Death	Disablement	Withdrawal	Retirement
20	196	25	16,300	0
25	110	25	12,800	0
30	95	25	9,900	0
35	113	32	7,500	0
40	158	38	7,001	0
45	249	56	4,701	0
50	427	106	2,799	0
55	769	222	0	7,500
56	859	261	0	5,800
57	966	309	0	6,101
58	1,085	365	0	6,899
59	1,212	427	0	7,801
60	1,351	496	0	12,001
61	1,501	570	0	25,000
62	0	0	0	100,000

Appendix C Summary of actuary's report for the purposes of Australian accounting standard AAS25

C.1 HCC Defined Benefits Fund

We have prepared this statement for the purposes of Australian Accounting Standard AAS25 relating to superannuation funds reporting, at the request of the Trustee of the Quadrant Superannuation Scheme ('the Scheme').

C.2 Applicable Fund

The statement is provided in respect of the HCC Defined Benefits Fund ('the Fund') which is a sub-fund of the Scheme.

C.3 Purpose

The purposes of this statement are:

- to provide the Trustee with a summary of our report on the most recent actuarial investigation of the Fund so that the Trustee can fulfil the requirements of paragraphs 63 and 64 of AAS25
- to specify the value of "Accrued Benefits" for the Fund, such value being determined in accordance with AAS25, and to describe the basis on which that value has been determined.

C.4 Effective Date

The effective date of this statement is 30 June 2014.

C.5 Summary Report

The summary of the actuarial report is provided in Addendum 1 to this statement.

C.6 Value of Accrued Benefits

Paragraph 50 of AAS25 states that:

"Accrued Benefits" of a defined benefit fund shall be measured ... using actuarial assumptions and valuations where appropriate, as the present value of expected future payments arising from membership of the plan up to the measurement date. The present value of expected future benefit payments shall be determined by discounting the gross benefit payments at a current, market determined, risk-adjusted discount rate appropriate to the plan".

The methods used for attributing benefits to membership of the Fund up to the Effective Date are set out in Addendum 2.

The assumptions used to determine the value of the Accrued Benefits are summarised in Attachment 2. These assumptions are similar to those adopted for the previous actuarial review of the Fund as at 30 June 2011.

The weighted average term of the liabilities at the effective date was 7.4 years. The value of Accrued Benefits at the effective date is shown in table 12.

Table 12. Value of Accrued Benefits

	Value of Accrued Benefits as at 30/06/2014 (\$'000)
Present Value of Defined Benefits	42,951
Accumulation Benefits	4,012
Accrued Benefits (minimum of Vested Benefits if applicable)	46,963

C.7 Compliance

The amount of Accrued Benefits shown above has been calculated. This statement and the attached summary report have been prepared in a manner consistent with Professional Standards and Guidance Notes issued by the Institute of Actuaries of Australia.



GEOFF MCRAE, B.Sc.

Fellow of the Institute of Actuaries of Australia
Rice Warner

17 March 2015

The effective date of the most recent review of the Fund was 30 June 2014 and covered the three year period to that date. The review was undertaken by Geoff McRae, Fellow of the Institute of Actuaries of Australia, of Rice Warner, and the results of the review are set out in a report dated 8 January 2015

- As at 30 June 2014, the net realisable value of the assets of the Fund, as determined by the Scheme Trustee, amounted to approximately \$49,698,000. This is also the value of assets used in determining the recommended contribution rate.
- The Fund has no liability in respect of postponed retirements or deferred benefits for former members or dependants.
- The present value of accrued benefits as at 30 June 2014 for the purpose of Australian Accounting Standard AAS25 was approximately \$46,963,000. This amount also constitutes the 'value of the liabilities in respect of accrued benefits' as defined in Division 9.5 of the Superannuation Industry Supervision (SIS) Regulations. A summary of the method and assumptions used to determine this value is set out below. The above figure includes accumulation liabilities of approximately \$4,012,000.
- The total as at 30 June 2014 of members' vested benefits for the purpose of Australian Accounting Standard AAS25 (i.e. voluntary resignation benefits, or early retirement benefits if eligible as of right), amounted to approximately \$46,288,000.
- At 30 June 2014, both the present value of accrued benefits and vested benefits were fully covered by the Fund's assets. The ratios of the assets to these totals are as follows:
 - Present value of accrued benefits 106%
 - Vested benefits 107%
- The actuarial review was carried out using the Aggregate Funding method, supplemented by projecting the Fund's assets and total vested benefits on the basis of the actuarial assumptions made. Contribution rates were determined after considering the future levels of the vested benefit index arising from the payment of the contribution rates derived from the Aggregate Funding method. If the Employers contribute at the recommended rates we expect that the assets of the Fund will exceed vested benefits at all times until 30 June 2017.
- The Actuary recommended that in future the Employers contribute as follows:
 - for HCC, either
 - > Option A. 11% of salary from 1/7/2015
 - > Option B. 9.5% of salary from 1/7/2015, subject to annual review.
 - for TasWater, reduce the current contribution rate to 11% of salary from 1 July 2015.

In addition, both of the Employers should also continue to contribute the amount of any contributions required under awards or other employment agreements, and continue to forward contributions made by members.

Noting that the future financial position of the Fund may vary from the projected levels (for example as a result of higher or lower investment returns), we also recommend that the Trustee continues its recent practice of briefly reviewing the recommended contribution rates after 30 June each year, to confirm they remain appropriate. If the Fund's financial position is stronger than expected, it may be appropriate for the employers to pay lower contributions than those recommended above, while if the financial position significantly weakens it may be necessary to pay higher contributions.

- The next actuarial review of the Fund is due as at 30 June 2017. At that time, the level of Employer contributions will be reviewed again.

Addendum 2 - actuarial assumptions and method used to determine the value of accrued benefits for AAS 25 purposes

Actuarial Assumptions

Economic Assumptions

Investment Return:	7.0% p.a. (net of investment expenses and taxes on investment earnings). After deducting the Fund management expenses noted below, the assumed investment return is 5.75% p.a.
Salary increases:	4.0% pa (including promotional increases).
Fund Management Expenses:	1.25% pa. In our valuation, this expense has been allowed for by reducing both the investment return and the crediting rate.
Crediting Rate:	5.75% pa. The crediting rate is net of allowance for the Fund management expenses noted above.

Leaving Service Rates

Assumptions regarding the rates at which members will leave the Fund on account of retirement, death, disablement and resignation have been revised at this actuarial investigation. These assumptions were based on the experience of the Fund and other similar funds within the Quadrant Superannuation Scheme. Further details can be found in the report on the actuarial review of the Fund as at 30 June 2014.

Method of Attributing Benefits to Past Membership

The methods used for attributing benefits to past membership are as follows:

- Defined Benefits on Retirement: actual accrual approach (based on the member's accrued retirement multiple at the effective date and the member's salaries projected to the assumed date of retirement).
- Defined Benefits on Death and Disablement: proportionate approach (proportion of total projected benefit amount, in the ratio of membership of the Fund to the effective date divided by membership to the projected date of death/disablement).
- Resignation Benefits: based on contributions received up the effective date only, increased with interest to the projected date of payment of the benefit (as applicable), and using the vesting factor (if any) applicable at the projected date of resignation.

- Accumulation benefits: the accumulated balance in the accumulation account at the effective date.

Where the total vested benefits for all of the members in the Fund exceed the value of the Accrued Benefits determined using the above method, a minimum of the total vested benefits has been applied.

Appendix D Actuary's statement for the purposes of the superannuation industry (supervision) regulations

D.1 HCC Defined Benefits Fund

We have conducted an actuarial review of the HCC Defined Benefits Fund ('the Fund') as at 30 June 2014. The review was based on 206 active members with annual superannuation salaries of approximately \$13,889,000. We have reviewed the data for reasonableness and we have no reason to believe the data used is not correct. In our opinion:

- The value of assets of the Fund was adequate to meet the liabilities of the Fund in respect of vested benefits as at 30 June 2014, with the result that the Fund was in a 'satisfactory financial position' as defined in the SIS Regulations.
- The value of the assets of the Fund was adequate to meet the value of the liabilities of the Fund in respect of the present value of accrued benefits as at 30 June 2014.
- Based on the assumptions used, and assuming the Employer contributes at the levels described below, the value of the assets will continue to be adequate to meet the value of the liabilities of the Fund in respect of vested benefits at all times during the period up to 30 June 2017. We therefore expect the Fund to remain in a 'satisfactory financial position' as defined in the SIS Regulations.

The Fund is used for Superannuation Guarantee purposes and is subject to the funding and solvency provisions of Division 9.3 of the SIS Regulations. All funding and solvency certificates required under Division 9.3 have been obtained for the period from the date of the last review to 30 June 2014 and we expect to be able to certify the solvency of the Fund in any funding and solvency certificate that may be required under the Regulations during the period from 1 July 2014 to the next actuarial review.

We recommend that in future the Employers contribute as follows:

- for HCC, either
 - Option A. 11% of salary from 1/7/2015
 - Option B. 9.5% of salary from 1/7/2015, subject to annual review.
- for TasWater, reduce the current contribution rate to 11% of salary from 1 July 2015.

In addition, both the Employers should also continue to contribute the amount of any contributions required under awards or other employment agreements, and continue to forward contributions made by members.

Noting that the future financial position of the Fund may vary from the projected levels (for example as a result of higher or lower investment returns), we also recommend that the Trustee continues its recent practice of briefly reviewing the recommended contribution rates after 30 June each year, to confirm they remain appropriate. If the Fund's financial position is stronger than expected, it may be appropriate for the employers to pay lower contributions than those recommended above, while if the financial position significantly weakens it may be necessary to pay higher contributions.

The recommended Employer contribution rates will be reviewed again at the next actuarial investigation, due as at 30 June 2014 or sooner if appropriate.



GEOFF MCRAE, B.Sc. FIAA

Fellow of the Institute of Actuaries of Australia
Rice Warner

17 March 2015

Attachment C

Actuarial Review of the
RACT Defined Benefits Fund
As at 30 June 2014

Prepared by:

GEOFF MCRAE, B.Sc. FIAA

Rice Warner

17 March 2015

17 March 2015

Mr Wayne Davy
Chief Executive Officer
Quadrant Superannuation Scheme GPO
Box 863
HOBART TAS 7001

Dear Wayne,

RACT defined benefits fund actuarial review as at 30 June 2011

We have carried out an actuarial review into the RACT Defined Benefits Fund ('the Fund') using the member data and other information provided as at 30 June 2014 and set out the results of the review and our findings in this report.

1. Executive summary

The actuarial review was carried out as part of the full triennial actuarial review into the Quadrant Superannuation Scheme, as required under the Superannuation Industry (Supervision) Act 1993 and the associated Regulations. The main purpose of the actuarial review into the Fund is to review the rate of Employer contributions payable to the Fund.

The actuarial review shows that:

- The financial position of the Fund has remained strong since the last actuarial review. As with the other Funds above, the main factors have been the strong investment returns over the last two years, allied with modest levels of salary increase.
- The value of Fund assets at 30 June 2014 was 17% more than the total of members' vested benefits. That is, the Fund had a vested benefits index (VBI) of 117% (115% in 2011).
- At the current rate of Employer contributions (1.5 times member contributions), assuming an average 7% pa investment return, the VBI is projected to fall gradually but to consistently be well in excess of 100% until the last member leaves the Fund. Given the very small membership (three members) remaining in the Fund, in practice the VBI will in future be quite sensitive to when members leave and the amounts of their benefits (related to the rate of salary increase), in addition to the actual investment returns.

- As a result, the financial position over time may be volatile, as each exiting member has a proportionally larger impact on the Fund as a whole.

1.1 Recommendations

We recommend that the Employer reduces its contributions to 1.25 times member contributions (including deemed contributions).

However, it may be appropriate for the Employer to vary its contributions periodically, taking into account the most recent analysis of the Fund's financial position. The declining membership means that the VBI may be more variable, and therefore the Employer may need to either reduce its contributions in future (to avoid over-funding the benefits) or to increase its contributions (to maintain security of benefits, for example as a result of ongoing poor investment returns).

Therefore we also recommend that the Trustee (in consultation with the Employer) carries out a brief review of the Employer contribution rate after each 30 June, and when each member retires to ensure it remains appropriate.

The Employer should continue to contribute the amount of any deemed member contributions, grossed up for the 15% contributions tax payable by the Trustee. Any contributions payable by members should also continue to be remitted to the Fund.

2. Introduction

2.1 General

The purpose of this report is to present the results of the actuarial review of the RACT Defined Benefits Fund ('the Fund') as at 30 June 2014. The Fund is a sub-fund of the Quadrant Superannuation Scheme (the Scheme).

This report is provided for the Trustee of the Scheme. We understand that other recipients of this report will be the Royal Automobile Club of Tasmania ('RACT' or 'the Employer') and the Fund's Policy Committee. Where this report is provided to these and other third parties, it should be provided in its entirety.

The review of the Fund is part of a full actuarial review of the Scheme in accordance with the Trust Deed of the Scheme and meets the requirements of the Superannuation Industry (Supervision) Act 1993 and the associated Regulations, which require actuarial investigations to be carried out at least once every three years.

We have prepared this report in accordance with Professional Standard 400 of the Institute of Actuaries of Australia relating to the actuarial review of defined benefit superannuation funds. We have also considered the requirements of Prudential Standard SPS 160 Defined Benefit Matters.

2.2 Governing Rules and Structure of Fund

The Scheme is a resident regulated fund and a complying fund for the purposes of the Superannuation Industry (Supervision) Act 1993. Provided it continues to comply with the relevant legislation, the Scheme is eligible for concessional tax treatment.

The Fund is a defined benefit sub-fund of the Scheme and provides lump sum benefits to members. The Fund is closed to new members.

The Scheme was established by a Trust Deed dated 30 November 1995, as subsequently amended. A consolidated Trust Deed was prepared dated 30 June 2007, and was then amended on 1 July 2007, 1 July 2009 and 3 December 2010. A summary of the Fund's main benefit provisions is set out in Appendix A of this report. For full details of the Fund's benefits, reference should be made to the Scheme's Trust Deed and the Fund's governing rules.

2.3 Name and Capacity of Actuary

This review has been undertaken by Geoff McRae, B.Sc., Fellow of the Institute of Actuaries of Australia, in his capacity as an employee of Rice Warner.

2.4 Previous Report

The previous actuarial investigation of the Fund as at 30 June 2011 was carried out by Geoff Morley, B.Sc. B.Com., Fellow of the Institute of Actuaries of Australia, and the report on that actuarial review was dated 8 May 2012.

That report showed that the value of assets at 30 June 2011 was more than the total of members' vested benefits. It was recommended that the Employer maintain its contributions at the rate of 1.5 times members' contributions.

3. Fund experience

3.1 Data Provided

The Scheme administrators provided us with the following information:

- membership details for the Fund as at 30 June 2014
- salary histories of members for the past four annual review dates;
- details of assets for each sub-fund as at 30 June 201
- information about investment returns after 1 July 2014.

A summary of the membership data at the previous and current actuarial reviews is shown in table 13.

Table 13. Summary of the membership data

	30/06/2014		30/06/2011	
Category	Number	Salaries (\$'000)	Number	Salaries (\$'000)
A	-	-	1	115,823
B	2	137,000	2	121,498
C	1	127,000	-	-
Total	3	\$264,000	3	\$237,321

The above salary figures exclude the 'KPI' performance bonuses which are determined after 30 June each year.

It is necessary to allow for the KPI bonuses in the actuarial investigation because, to the extent that the Employer declares such bonuses, they will affect members' benefits and contributions in future. The performance bonuses declared for defined benefit members for the past two years have varied at individual member level. We used this experience to estimate the expected future bonuses.

Table 14 shows average age and membership statistics by membership category at the current and previous actuarial review dates.

Table 14. Average age and membership statistics by membership category at the current and previous actuarial review dates

	30/06/2014		30/06/2011	
Category	Average Age (years)	Average Membership (years)	Average Age (years)	Average Membership (years)
A	n/a	n/a	52.3	16.8
B	58.5	29.2	55.7	26.2
C	55.0	19.7	n/a	n/a
All Members	57.3 years	26.1 years	54.6 years	23.1 years

The salary weighted average age of the RACT members has increased by 2.7 years since 1 July 2011 and the salary weighted average membership has increased by three years.

The membership details showed total vested benefits of \$1,017,000 for the RACT defined benefit members as at 30 June 2014.

3.2 Assets

The market value of the net assets as at 30 June 2014 was provided by the Fund's personnel and was equal to approximately \$1,190,000. We have taken this amount to be the value of assets available to support the Fund's liabilities.

The Fund is invested in a range of asset classes in accordance with the Trustee's investment policy for the assets supporting defined benefit liabilities, with a target weighting of about 70% to growth assets (such as shares and property) and 30% to defensive assets (such as fixed interest and cash). We consider that this allocation is within the range of alternatives suitable to support the liabilities of the Fund given the restrictions applicable to defined benefit asset holdings within the Scheme. We, however, recommend that the specific asset allocations, for the Scheme and the Fund, be kept under review because of the age profile of the Fund.

3.3 Investment Returns

The average return on the Fund's assets over the three years to 30 June 2014 was 9.8% pa (net of investment management expenses and tax, but before deduction of Fund management expenses). This was greater than the return of 7% assumed in the previous actuarial review and has therefore had a positive impact on the financial position of the Fund as at 30 June 2014, compared to that projected in the 2011 review.

The investment return for the period from 30 June 2014 up to 31 December 2014 was 3.8% (7.6% pa). This is higher than the 7% pa adopted in our review assumptions and is expected to have a positive impact on the Fund's financial position.

3.4 Salary Increases

Members who remained in the Fund over the whole three years experienced average salary increases (before allowing for KPI bonuses) of 4.0% pa, the same as the 4.0% pa assumed in the 2011 actuarial investigation.

3.5 Expenses

The Total Fee for the 2013/2014 financial year was equal to 1.21% pa. This comprised of 0.30% of Reserve Fee, 0.05% of Asset Consultant Fee, 0.06% of Custodian Fee and 0.80% of Administration Fee. An allowance for expenses at 1.25% pa is assumed, the same as that used in the previous review. These charges are also deducted off the crediting rates applied to members' benefits.

We have therefore allowed for a deduction (from both the Fund's investment return and the crediting rate applied to members) at the above rates in all future years.

3.6 Interest Crediting Rate

From 1 July 2011, the crediting rate applied to Defined Benefit or Accelerated Benefit accounts changed from a three year smoothed rate to an annual unsmoothed rate. The crediting rate is now based on the investment return on the fund's assets, adjusted for fees and taxes in accordance with the crediting rate policy adopted by the Quadrant Trustee.

Therefore, the interest rate credited each year will closely reflect the investment return in that same year. This removes one source of fluctuation in the Fund's future financial position, because movements in the parts of members' benefits that are linked the crediting rates will be more closely aligned to movements in the Fund's asset values.

4. Financial position

4.1 Measures of Solvency

There are a number of ways to measure the financial position of the Fund at the review date. We have adopted the following measures which are compared to the value of the Fund's assets:

- **Vested Benefits:** the benefits to which members would have been entitled had they voluntarily left service as at 30 June 2014.
- **Past Service Liabilities:** The present value of that part of members' benefits to which they would have been entitled had they voluntarily left service as at 30 June 2014. This figure is an actuarial estimate, and represents the best estimate of the accrued liabilities of the Fund as at 30 June 2014.
- **Minimum Requisite Benefits (MRBs):** the minimum benefit required to be made available to employees in order that the Employer satisfies its superannuation guarantee obligations. If the assets fall below this figure, the Fund is regarded as 'technically insolvent'.

In each case, we have calculated an index by dividing the value of assets by the total of the relevant measure for all members. Table 15 below compares these indices at the current review to those calculated at 30 June 2011. The figures include allowance for KPI bonuses and additional benefits of an accumulation nature.

Table 15. Indices at current review compared to those calculated.

	30/06/2014 Assets = \$1,190,000		30/06/2011 Assets = \$849,802	
Measure	Total of Measure (\$'000)	Index (%)	Total of Measure (\$0)	Index (%)
Vested Benefits	1,017	117	739	115
Accrued Retirement Benefits	1,136	105	n/a	n/a
Past Service Liabilities	1,023	116	774	110
MRBs	559	213	389	219

The ratios in table 15 show that the Fund was in a strong financial position as at 30 June 2014. Our comments on the individual indices are:

- The vested benefits remain covered by assets as at 30 June 2014. As a result of positive returns since 30 June 2014, the VBI is likely to currently remain above 100%.

- The fact that the coverage of assets over past service liabilities is greater than 100% indicates a sound level of funding at the valuation date.
- The minimum requisite benefits (MRBs) were very well funded as at 30 June 2014.
- It should be noted that the investment return for the period from 30 June 2014 up to 31 December 2014 has been around 3.8% (7.6% pa). This is higher than the 7% pa assumed in the actuarial review calculations and is expected to have a positive impact on the Fund's financial position.

4.2 Retrenchment Benefits

Benefits are also payable from the Fund to members on retrenchment from the Employer's service. The benefit is defined as the amount 'calculated by an actuary as the being the Member's equitable share of the Scheme if he or she remained in Service'.

The past practice has been for a member's 'equitable share' for these purposes to be based on the member's undiscounted accrued retirement benefit ('ARB'), reduced for any shortfall in the value of Fund assets below the total of all members' ARBs, subject to a minimum of their vested benefits. Where the actuary advises that a member's retrenchment benefit is less than the ARB, the Employer's practice has been to request that the Trustee pay a benefit equal to the ARB and to pay an additional contribution in order to fund the difference.

At 30 June 2014, the ratio of assets to the total undiscounted accrued retirement benefits was 105%. If a member had been retrenched at that date, the Fund would have had sufficient money to pay for the member without making any additional Employer contributions.

4.3 Termination Benefits

The trust deed does not provide for specific benefits to be paid to members on the termination of the Fund. However, in view of the very small remaining membership, there is a reasonable likelihood that in the next few years, the last members may leave the Fund. Therefore in our view the Trustee and the Employer should consider the implications of that possibility. This should include consideration of the treatment of any remaining assets (or shortfall in assets) that may arise at that time.

4.4 Insurance Position

The Fund is protected against adverse death and disablement experience by means of group life insurance arrangements covering the lump sum death and permanent disability (TPD) risks.

Table 16 compares the Fund's asset value and the sums insured as at 30 June 2014 to the total lump sum death and disability benefit. It shows that, together with the Fund assets, the insurance arrangements adequately cover the total death and TPD benefit liabilities.

Table 16. Comparison of the Fund's asset value and the sums insured

RACT Defined Benefit Fund	Death Benefits (\$'000)	TPD Benefits (\$'000)
Value of Assets	1,190	1,190
Sums Insured	497	497
Total Assets plus insurance	1,687	1,687
Total Death and TPD Benefits	1,571	1,571
Excess/ (Shortfall)	116	116
Excess as % Total Death/TPD Benefits	7.4%	7.4%

For a defined benefit fund, it is normal that the value of the assets plus the value of the sums insured does not exactly equal the total death and TPD benefits. There will generally be a small excess or shortfall, which varies in line with movements in the Fund's assets. In our view, the excess above is not unreasonable in this context.

5. Funding the benefits

5.1 General Comments

Over the life of the Fund, the ultimate cost to the Employer of providing the benefits will be equal to:

- the amount of benefits paid out
- the expenses of running the Fund including tax
- members' contributions; and the return on investments.

The cost of providing the benefits will depend on the Fund's experience in relation to:

- economic factors such as the investment return obtained on the Fund's assets and the rates at which salaries increase
- factors influencing membership turnover such as mortality and disability, resignation and retirement.

The valuation process involves making assumptions about the likely levels of the above factors in the future. Using these assumptions, we can project the expected future cash flows and benefits for the current members of the Fund. By discounting these cash flows, we derive a present value for the liabilities which we can compare to the value of the current assets.

The ultimate cost to the Employer will not depend on the actuarial assumptions or methods used to project the cash flows and benefits, but on the actual experience of the Fund. The financing method and the actuarial assumptions will however affect the timing of the cost to the Employer.

5.2 Financing Method

There are various financing methods that can be used to determine the Councils' contributions that should be paid over time. The funding method adopted in this review is different from the method used at the previous review (target funding method). This review uses the aggregate funding method to determine the contribution rate adjusted for surplus and the Employer cost for future service, which equal to 3.4% pa and 16.9% pa respectively.

The contribution rate adjusted for surplus indicates the level of contribution required when surplus assets are taken into account and assumptions on which the calculations are based are as expected. If the future investment returns are lower than expected, the surplus will be depleted and this level of contribution will not be sufficient. Therefore, this contribution rate is used as a lower bound for determining the recommended contribution rate.

The Employer cost for future service does not take into account any surplus that has accumulated. It gives an indication of the level of contribution required when there is no surplus. This is a more prudent measure and it also normally sets the upper bound for determining the recommended contribution rate.

Nevertheless, the stability of the Employer's contributions over time will depend on how closely the Fund's actual experience matches the expected experience. If the actual experience differs from that expected, the Employer's contribution rate may need to be adjusted accordingly to ensure the Fund remains on course towards its target of financing members' benefits.

For this Fund, the small number of members may also contribute to volatility in the Employer contributions over time. It is not possible to predict exactly when each member will leave the Fund and the exit of a member could cause the financial position to change significantly. If the actual experience is similar to that expected, then the benefit paid should be similar to the actuarial liability ('reserve') for the member. In this case, the dollar amount of the surplus in the Fund will not be affected, but any surplus will be spread over the reduced liabilities for the remaining members. The result will be an improvement in the financial position of the Fund.

However, if a member leaves the Fund and the benefit payable exceeds the member's reserve, then the surplus will reduce and the financial position may be weakened. Additional Employer contributions may then be required to secure members' entitlements.

5.3 Assumptions

Taking into account the long-term experience of superannuation funds with investment strategies that are similar to that adopted for this Fund, we have adopted a long-term assumption of 7.0% pa for investment returns (net of investment expenses and taxes on investment earnings, but before deduction of Fund management expenses).

However, to assess the sensitivity of the results to alternative investment market conditions in the short term, we have considered the three alternative scenarios in table 17.

Table 17. Alternative scenarios

Scenario	2014/15 to 2018/19	2019/20 & later
Unfavourable	5.00% pa	7.00% pa
Medium	7.00% pa	7.00% pa
Favourable	9.00% pa	7.00% pa

We have assumed salary increases of 4.0% pa, inclusive of promotional increases.

The long-term investment return assumption and the salary growth assumption are the same as those adopted for the 2011 actuarial review and maintain the assumed real rate of return assumption at 3.0% pa (before expenses). In addition, the unfavourable and favourable scenarios have been selected to illustrate the impact of a period of under or over performance of the Fund's investments. Relative to the medium scenario, the unfavourable scenario assumes underperformance of 2% pa up to 30 June 2019, while the favourable scenario assumes over performance of 2% pa up to 30 June 2019.

From 1 July 2011, the crediting rate applied to Defined Benefit or Accelerated Benefit accounts changed from a three year smoothed rate to an annual unsmoothed rate. Therefore we have assumed that after that date, the interest credited to members' accounts will be equal to the investment return (after adjustment for the administration fees borne by members).

Since the number of defined benefit members in the Fund is small, we have very little experience upon which to base the assumed rates of death, disability, withdrawal and retirement. Therefore we have assumed that members remain in the Fund until the normal retirement age. This is the same approach as that adopted for the 2011 actuarial review.

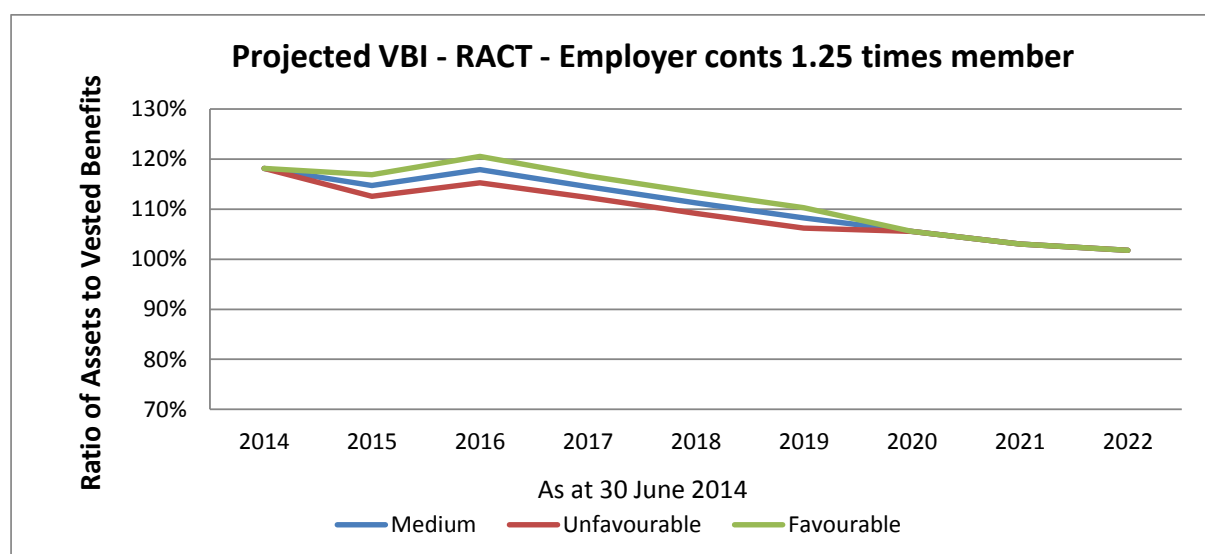
Appendix B (Summary of valuation basis) sets out the valuation basis in more detail.

6. Employer contributions

6.1 Projection of Funding Indices

Graph 7 shows the projected level of the Vested Benefit Index over the next eight years, allowing for estimated KPI bonuses and assuming that the Employer reduces contribution rates to 1.25 times member contributions. Additional accumulation benefits have been included from the projections.

Graph 7. Projected VBI over the next eight years



The VBI is projected to fall in 2015 and to rise in 2016 then to fall gradually but to consistently be well in excess of 100% until the last member leaves the Fund. Given the very small membership (three members) remaining in the Fund, in practice the VBI will in future be quite sensitive to when members leave and the amounts of their benefits (related to the rate of salary increase), in addition to the actual investment returns.

In the graph above, the movements in the VBI are largely driven by the assumed benefit payment pattern. We also note that the number of members remaining in the Fund is very small. Therefore, the *actual* benefit payment pattern may vary significantly from the assumed, and so the actual VBI may differ significantly from that illustrated above.

6.2 Recommended Employer Contributions

We recommend that the Employer reduces its contribution rate to 1.25 times member contributions (including deemed contributions) from 1 July 2015.

However, it may be appropriate for the Employer to vary its contributions periodically, taking into account the most recent analysis of the Fund's financial position. The declining membership means that the VBI may be more variable, and therefore the Employer may need to either reduce its contributions in future (to avoid over-funding the benefits) or to increase its contributions (to maintain security of benefits, for example as a result of ongoing poor investment returns).

Therefore we also recommend that the Trustee (in consultation with the Employer) carries out a brief review of the Employer contribution rate after each 30 June annual review, to ensure it remains appropriate.

The Employer should continue to contribute the amount of any deemed member contributions, grossed up for the 15% contributions tax payable by the Trustee. Any contributions payable by members should also continue to be remitted to the Fund.

6.3 Next Actuarial Review

The next full actuarial review into the Fund should be conducted with an effective date no later than 30 June 2017, as required under the SIS Regulations.

Yours sincerely,



GEOFF MCRAE, B.Sc.

Fellow of the Institute of Actuaries of Australia
Rice Warner

Appendix A Benefit – summary

A.1 Salary

Salaries are adjusted as at each annual review date (1 July). A further retrospective adjustment is made once the Employer has determined the Member's performance bonus for the previous financial year.

A.2 Final Average Salary (FAS)

Final Average Salary is the average of the Member's Salary at the date of exit and the two previous annual review dates.

A.3 Categories

The member contribution levels and rates of accrual for the different categories of defined benefit membership are shown in table 18.

Table 18. Member contribution levels and rates of accrual

Category	Member Contributions % of Salary	Accrual Rate % of FAS
A	6	17.5%
B	5	15%
C	6 – deemed	20%

Contributions are based on Salary. Additional contributions are paid to the Fund once the performance bonuses have been determined.

A.4 Retirement after age 58

Benefit = Accrual x Final Average Salary x Period of Membership

Members at 30 June 1985 have an additional accrued multiple at that time (calculated in accordance with the Trust Deed that applied then, based on Years of Service prior to 30 June 1985).

Any rollover and additional contributions accounts are payable in addition. Benefits would be reduced for any surcharge debt accounts or for any early releases of benefits (for example in relation to family law matters).

A.5 Leaving Service before age 58

Before Completing 11 Years of Service

A return of member and any deemed member contributions (together with interest at the Fund Earning Rate), increased by 10% for each year of service, with a minimum increase of 45%.

After Completing 11 Years of Service

210% of member or any deemed member contributions (together with interest at the Fund Earning Rate) at exactly 11 years of service and increasing progressively to the retirement benefit at age 63.

Any rollover and additional contributions accounts are payable in addition. Benefits would be reduced for any surcharge debt accounts or for any early releases of benefits (for example in relation to family law matters).

A.6 Death and Total and Permanent Disablement (TPD)

The amount payable is the normal retirement benefit that would have been payable had the member remained in service with unaltered salary until Normal Retirement Date.

The benefit for Category C members is subject to minimum multiple of seven times salary.

Any rollover and additional contributions accounts are payable in addition. Benefits would be reduced for any surcharge debt accounts or for any early releases of benefits (for example in relation to family law matters).

A.7 SG Minimum Benefit

All benefits are subject to a minimum under Superannuation Guarantee legislation. The minimum benefit is defined in the Benefit Certificate for the Fund.

Appendix B Summary of valuation basis

Table 19. Summary of valuation basis

Method	Aggregate funding												
Economic Assumptions													
Investment Return	<p>A long-term assumption of 7.0% pa (net of investment expenses and taxes on investment earnings, but before deduction of Fund management expense).</p> <p>However, to assess the sensitivity of the results to alternative investment market conditions, in the short term we have assumed the three scenarios in the table below will apply.</p> <table><tr><th>Scenario</th><th>2014/15 to 2018/19</th><th>2019/20 & later</th></tr><tr><td>Unfavourable</td><td>5.00%</td><td>7.00%</td></tr><tr><td>Medium</td><td>7.00%</td><td>7.00%</td></tr><tr><td>Favourable</td><td>9.00%</td><td>7.00%</td></tr></table> <p>For purposes of the statements required in accordance with AAS25 (see appendix C), we have used the assumptions in the ‘medium’ scenario above.</p>	Scenario	2014/15 to 2018/19	2019/20 & later	Unfavourable	5.00%	7.00%	Medium	7.00%	7.00%	Favourable	9.00%	7.00%
Scenario	2014/15 to 2018/19	2019/20 & later											
Unfavourable	5.00%	7.00%											
Medium	7.00%	7.00%											
Favourable	9.00%	7.00%											
Salary Increase Rate	4.0% pa inclusive of promotional increases.												
Fund Management Expenses	1.25% p.a. In our valuation, this expense has been allowed for by reducing both the investment return and the crediting rate.												
Crediting Rate	<p>From 1 July 2011, the crediting rate applied to Defined Benefit or Accelerated Benefit accounts changed from a three year smoothed rate to an annual unsmoothed rate. Therefore based on the investment return scenarios noted above, and after deducting the fund management expenses noted above, the assumed crediting rates are:</p> <table><tr><th>Scenario</th><th>2014/15 to 2018/19</th><th>2019/20 & later</th></tr><tr><td>Unfavourable</td><td>3.75%</td><td>5.75%</td></tr><tr><td>Medium</td><td>5.75%</td><td>5.75%</td></tr><tr><td>Favourable</td><td>7.75%</td><td>5.75%</td></tr></table>	Scenario	2014/15 to 2018/19	2019/20 & later	Unfavourable	3.75%	5.75%	Medium	5.75%	5.75%	Favourable	7.75%	5.75%
Scenario	2014/15 to 2018/19	2019/20 & later											
Unfavourable	3.75%	5.75%											
Medium	5.75%	5.75%											
Favourable	7.75%	5.75%											

Method	Aggregate funding
Asset Valuation	Market values as provided by the Scheme administrators.

B.1 Taxation:

The assumed investment returns are net of investment fees and investment tax. The contribution tax rate is assumed to be 15% of concessional contributions.

We have assumed that no further surcharge assessments are received by the Trustee after 30 June 2014.

B.2 Decrement Rates:

We have assumed that all members will remain in the Fund until age 63.

Appendix C Summary of actuary's report for the purposes of Australian accounting standard AAS25

C.1 RACT Defined Benefits Fund

We have prepared this statement for the purposes of Australian Accounting Standard AAS25 relating to superannuation funds reporting, at the request of the Trustee of the Quadrant Superannuation Scheme ('the Scheme').

C.2 Applicable Fund

The statement is provided in respect of the RACT Defined Benefits Fund ('the Fund') which is a sub-fund of the Scheme.

C.3 Purpose

The purposes of this statement are:

- To provide the Trustee with a summary of our report on the most recent actuarial investigation of the Fund so that the Trustee can fulfil the requirements of paragraphs 63 and 64 of AAS25.
- To specify the value of 'Accrued Benefits' for the Fund, such value being determined in accordance with AAS25, and to describe the basis on which that value has been determined.

C.4 Effective Date

The effective date of this statement is 30 June 2014.

C.5 Summary Report

The summary of the actuarial report is provided in Addendum 1 to this statement.

C.6 Value of Accrued Benefits

Paragraph 50 of AAS25 states that:

"Accrued Benefits" of a defined benefit fund shall be measured ... using actuarial assumptions and valuations where appropriate, as the present value of expected future payments arising from membership of the plan up to the measurement date. The present value of expected future benefit payments shall be determined by discounting the gross benefit payments at a current, market determined, risk-adjusted discount rate appropriate to the plan".

The methods used for attributing benefits to membership of the Fund up to the Effective Date are set out in Addendum 2.

The assumptions used to determine the value of the Accrued Benefits are summarised in Addendum 2. These assumptions are similar to those adopted for the previous actuarial review of the Fund as at 30 June 2011.

The value of Accrued Benefits at the effective date is shown in table 19.

Table 20. Value of Accrued Benefits

	Value of Accrued Benefits as at 30/06/2014 (\$)
Present Value of Defined Benefits	1,020
Accumulation Benefits	3
Accrued Benefits	\$1,023

C.7 Compliance

The amount of Accrued Benefits shown above has been calculated. This statement and the attached summary report have been prepared in a manner consistent with Professional Standards and Guidance Notes issued by the Institute of Actuaries of Australia.



GEOFF MCRAE, B.Sc.

Fellow of the Institute of Actuaries of Australia

17 March 2015

Addendum 1 - summary of actuarial report

The effective date of the most recent review of the Fund was 30 June 2014 and covered the three year period to that date. The review was undertaken by Geoff McRae, Fellow of the Institute of Actuaries of Australia, in his capacity as an employee of Rice Warner, and the results of the actuarial review are set out in a report dated 8 January 2015.

A summary of this report is as follows:

- As at 30 June 2014, the net realisable value of the assets of the Fund, based on information supplied by the Scheme administrators, amounted to approximately \$1,190,000. This is also the value of assets used in determining the recommended contribution rate.
- The Fund has no liability in respect of postponed retirements or deferred benefits for former members or dependents.
- The present value of accrued benefits as at 30 June 2014 for the purpose of Australian Accounting Standard AAS25 was approximately \$1,023,000. This amount also constitutes the fits as at 30 June 2014 for the purpose of accrued benefits' as defined in Division 9.5 of the Superannuation Industry Supervision (SIS) Regulations. A summary of the method and assumptions used to determine this value is set out below. The above figure includes accumulation liabilities of approximately \$3,000.
- The total as at 30 June 2014 of members' vested benefits for the purpose of Australian Accounting Standard AAS25 (i.e. voluntary resignation benefits, or early retirement benefits if eligible as of right), amounted to approximately \$1,017,000.
- The present value of accrued benefits and vested benefits as at 30 June 2014 were both covered by the Funds of25 was The ratios of the assets to these totals are as follows:

- present value of accrued benefits	116%
- vested benefits	117%
- The actuarial review was carried out using the Aggregate Funding method, supplemented by projecting the Fund's assets and total vested benefits on the basis of the actuarial assumptions made. Contribution rates were determined after considering the future level of the vested benefit index arising from the payment of the contribution rates derived from the Aggregate Funding method. As a minimum, we required that the assets of the Fund be expected to exceed vested benefits at all times until 30 June 2017.
- The review disclosed that the Fund was in a 'satisfactory financial condition' at 30 June 2014 and the Actuary recommended that Employer continues to contribute at the rate of 1.25 times member contributions (including deemed contributions) from 1 July 2015, unless the Fund's financial position changes such that a different contribution rate is appropriate. The next actuarial review is due as at 30 June 2017 and the level of recommended Employer contributions will be reviewed again at that time.

Addendum 2 - actuarial assumptions and method used to determine the value of accrued benefits for AAS 25 purposes

Actuarial Assumptions

Economic Assumptions

Investment Return:	7.0% pa. (net of investment expenses and taxes on investment earnings). After deducting the Fund management expenses noted below, the assumed investment return is 5.75% p.a.
Salary increases:	4.0% pa. (including promotional increases).
Fund Management Expenses:	1.25% pa. In our valuation, this expense has been allowed for by reducing both the investment return and the crediting rate.
Crediting Rate:	5.75% pa. The crediting rate is net of allowance for the Fund management expenses noted above.

Leaving Service Rates

Assumptions regarding the rates at which members will leave the Fund on account of retirement, death, disablement and resignation have been revised at this actuarial investigation. These assumptions were based on the experience of the Fund and other similar funds within the Quadrant Superannuation Scheme. Further details can be found in the report on the actuarial review of the Fund as at 30 June 2014.

Method of Attributing Benefits to Past Membership

The methods used for attributing benefits to past membership are as follows:

- Defined Benefits on Retirement: actual accrual approach (based on the member's accrued retirement multiple at the effective date and the member's salaries projected to the assumed date of retirement)
- Defined Benefits on Death and Disablement: proportionate approach (proportion of total projected benefit amount, in the ratio of membership of the Fund to the effective date divided by membership to the projected date of death/disablement).
- Resignation Benefits: based on contributions received up the effective date only, increased with interest to the projected date of payment of the benefit (as applicable), and using the vesting factor (if any) applicable at the projected date of resignation.
- Accumulation benefits: the accumulated balance in the accumulation account at the effective date.

Where the total vested benefits for all of the members in the Fund exceed the value of the Accrued Benefits determined using the above method, a minimum of the total vested benefits has been applied.

Appendix D Actuary's statement for the purposes of the superannuation industry (supervision) regulations

D.1 RACT Defined Benefits Fund

We have conducted an actuarial review of the RACT Defined Benefits Fund ('the Fund') as at 30 June 2014. The review was based on three active members with annual superannuation salaries of approximately \$291,000. Various checks were carried out in relation to the data and we have no reason to believe the data used is not correct. In our opinion:

- The value of assets of the Fund was adequate to meet the liabilities of the Fund in respect of vested benefits as at 30 June 2014, with the result that the Fund was in a 'satisfactory financial position' as defined in the SIS Regulations.
- The value of the assets of the Fund was adequate to meet the value of the liabilities of the Fund in respect of the present value of accrued benefits as at 30 June 2014. Based on the assumptions used, and assuming the Employer contributes at the levels described below, the value of the assets will continue to be adequate to meet the value of the liabilities of the Fund in respect of vested benefits at all times during the period up to 30 June 2017. We therefore expect the Fund to remain in a 'satisfactory financial position' as defined in the SIS Regulations.

The Fund is used for Superannuation Guarantee purposes and is subject to the funding and solvency provisions of Division 9.3 of the SIS Regulations. All funding and solvency certificates required under Division 9.3 have been obtained for the period from the date of the last review to 30 June 2014 and We expect to be able to certify the solvency of the Fund in any funding and solvency certificate that may be required under the Regulations during the period from 1 July 2014 to the next actuarial review.

We recommend that, with effect from 1 July 2014, the Employer contribute at the rate of 1.25 times member contributions (including deemed contributions), plus deemed member contributions grossed up for contributions tax, until the results of the next actuarial review due as at 30 June 2017 become available, unless the Fund's financial position changes such that a different contribution rate is appropriate.



GEOFF MCRAE, B.Sc.

Fellow of the Institute of Actuaries of Australia
17 March 2015

Attachment D

Actuarial Review of the
LCC Defined Benefits Fund

As at 30 June 2014

Prepared by:

Geoff McRae, B.Sc. FIAA

Rice Warner Actuaries

17 March 2015

17 March 2015

Mr Wayne Davy
Chief Executive Officer
Quadrant Superannuation Scheme GPO Box 863
HOBART TAS 7001

Dear Wayne,

LCC defined benefits fund actuarial review as at 30 June 2014

We have carried out an actuarial review into the LCC Defined Benefits Fund ('the Fund') using the member data and other information provided as at 30 June 2014 and set out the results of the review and our findings in this report.

1. Executive summary

The actuarial review was carried out as part of the full triennial actuarial review into the Quadrant Superannuation Scheme, as required under the Superannuation Industry (Supervision) Act 1993 and the associated Regulations. The main purpose of the actuarial review into the Fund is to review the rate of Employer contributions payable to the Fund.

The actuarial review shows that:

- The Fund was in a satisfactory financial position as at 30 June 2014 (i.e. assets greater than vested benefits). Despite similar economic results (strong investment returns over the last two years and moderate salary increases) since 1 July 2011 to the other Funds, this Fund is the only one with a weaker financial position in 2014 than that in 2011. This weakening is related to:
 - Significant salary increases being concentrated in the first of the three years.
 - A greater proportion of members over age 55 holding accumulation benefits rather than defined benefits than for the other Funds.
 - Fund members over age 55 being paid the Early Retirement Benefit as a matter of course, whereas contribution rates were set at the previous actuarial review, assuming any members over age 55 would not be paid an early retirement benefit.
 - The value of Fund assets at 30 June 2014 was 4% more than the total of members' vested benefits. That is, the Fund had a vested benefits index (VBI) of 104% (assuming consent is required and not provided for higher early retirement benefits, where applicable, and including allowance for additional accumulation benefits). The equivalent VBI in 2011 was 106%. This is

the basis on which vested benefits have been calculated and reported as at the 30 June 2014 annual administration review.

- If vested benefits are calculated on the basis of all members leaving service after age 55 being provided with an Early Retirement Benefit, the VBI reduces to 101%
- We performed separate future contribution rate calculations for the Launceston City Council and TasWater members (previously Ben Lomond Water and Onstream). These projections indicated an average cost of future accruing benefits of 9.6% of salary for LCC and 9.3% for Taswater, the slightly higher cost arising from a slightly different mix of ages and members in each benefit category.
- If the early retirement benefits are limited to the leaving service benefits, these costs each reduce by about 0.4% of salary.
- Projections of the VBI for the Fund, assuming an investment return of 7% and a continuation of current contribution rates, and allowing for the current EA that the Council has with its employees, showed the Fund maintaining its current VBI in the short term followed by a later slight strengthening.
- We understand that Launceston City Council is no longer admitting new employees to the Fund. This is consistent with the earlier closure of the Fund to new entrants by TasWater employers.

1.1 Recommendations

- Taking account of the calculated employer cost of future accruing benefits, the current and projected levels of the funding indices under the investment return scenarios considered in this report, we recommend that Launceston City Council contributions to the Fund increase to a rate of 11.0% of salary, and that TasWater increase its contribution rate to 12.5% of salary, both from 1 July 2015. The rationale for the increase for LCC is the small current margin of assets over vested benefits. For TasWater, the higher rate is designed to improve the current VBI of 99%.
- If the early retirement benefits were restricted to the amount of the leaving service benefits, the above contributions could be reduced by 0.4% of salary.
- Noting that the future financial position of the Fund may vary from the projected levels (for example as a result of higher or lower investment returns), we also recommend that the Trustee continues its recent practice of briefly reviewing the recommended contribution rates after 30 June each year, to confirm they remain appropriate. If the Fund's financial position is stronger than expected, it may be appropriate for the employers to pay lower contributions than those recommended above, while if the financial position significantly weakens it may be necessary to pay higher contributions.
- In addition the Employers should continue to contribute:
 - Contributions to defined benefit members' accumulation accounts under the Employer's Enterprise Agreement (currently 6% of salary), for those permanent employees who have these contributions paid to this Fund.
 - Member contributions as required under the Fund's rules for defined benefit members, whether from after-tax salary, by salary sacrifice or deemed contributions (grossed up for contributions tax where appropriate).
 - Contributions in accordance with the Enterprise Agreement (currently 12% of salary) in respect of those temporary and casual employees who have these contributions paid to accumulation accounts in this Fund.
 - Any voluntary member or Employer contributions.

These recommendations are based on the assumptions used for this report and the actual experience of the Fund may be different to that assumed. The Trustee should therefore continue to monitor the Vested Benefits Index on an annual basis. If the financial position is stronger than anticipated, it may be appropriate to reduce the contribution. If the financial position is weaker than anticipated, it may be appropriate to increase the Employers' contributions and possibly amend the basis for calculating the equitable share for retrenched members.

As an alternative to the contribution rates recommended above, the following rates would be acceptable alternatives:

- For LCC either
 - increasing its contribution rate to 10.5% from 1 July 2015 and to 11.5% from 1 July 2016; or
 - paying a lump sum contribution and adjusting the future employer contribution rate to a level agreed in writing between the Trustee and the employer, after seeking advice from the Fund actuary.
- For TasWater – 11.5% from 1 July 2015 and 13.0% from 1 July 2016.

Finally, we note the comment in the previous actuarial review report that the basis for determining the 'equitable share', payable to retrenched members, may need to be varied in future, from time-to-time, to ensure that it remains appropriate. We consider the current basis to still be appropriate.

We will review the recommendations in this report as a part of the next actuarial review of the Fund, or sooner if circumstances warrant.

2. Introduction

2.1 General

The purpose of this report is to present the results of the actuarial review of the LCC Defined Benefits Fund ('the Fund') as at 30 June 2014. The Fund is a sub-fund of the Quadrant Superannuation Scheme (the Scheme).

This report is provided for the Trustee of the Scheme. We understand that other recipients of this report will be the Launceston City Council ('the Council'), TasWater (previously Ben Lomond Water and Onstream), and the Fund's Policy Committee. Where this report is provided to these and other third parties, it should be provided in its entirety.

The review of the Fund is part of a full actuarial review of the Scheme in accordance with the Trust Deed of the Scheme and meets the requirements of the Superannuation Industry (Supervision) Act 1993 and the associated Regulations, which require actuarial investigations to be carried out at least once every three years.

We have prepared this report in accordance with Professional Standard 400 of the Institute of Actuaries of Australia relating to the actuarial review of defined benefit superannuation funds. We have also considered the requirements of Prudential Standard SPS 160 Defined Benefit Matters.

2.2 Governing Rules and Structure of Fund

The Scheme is a resident regulated fund and a complying fund for the purposes of the Superannuation Industry (Supervision) Act 1993. Provided it continues to comply with the relevant legislation, the Scheme is eligible for concessional tax treatment.

The Fund is a defined benefit sub-fund of the Scheme and provides lump sum benefits to members. The Fund is now closed to new members.

A summary of the Fund's main benefit provisions is set out in Appendix A of this report. For full details of the Fund's benefits, reference should be made to the Scheme's Trust Deed and the Fund's governing rules.

2.3 Name and Capacity of Actuary

This review has been undertaken by, Geoff McRae, B.Sc., Fellow of the Institute of Actuaries of Australia, in his capacity as an employee of Rice Warner.

2.4 Previous Report

The previous actuarial investigation of the Fund as at 30 June 2011 was carried out by Geoff Morley, B.Sc. B.Com., Fellow of the Institute of Actuaries of Australia, and the report on that actuarial review was dated 10 May 2012.

That report showed that the Fund was in a sound financial position with the assets exceeding the total of members' vested benefits by 6% (VBI = 106%) at that date. The recommended employer contributions were:

Launceston City Council: 10% of salaries (LCC increased its contributions from 9% from January 2012)

- Ben Lomond Water and On-stream: 9% of salaries

In addition, the employers were to continue to contribute the amount of any contributions required under awards or other employment agreements, and continue to forward contributions made by members.

2.5 Significant Events

Ben Lomond Water and On-stream became part of TasWater from 1 July 2013.

We are not aware of any other significant events that have occurred between 30 June 2011 and 30 June 2014, or since 30 June 2014, that we have not already taken into account, which would have a material impact on the recommendations in this report.

2.6 Purpose of Review

The purposes of this actuarial review are to:

- assess the financial position of the Fund

- recommend an appropriate level of Employer contributions for the future
- satisfy the requirements of the Trust Deed
- meet the legislative requirements.

3. Fund experience

3.1 Data Provided

The Scheme administrators provided us with the following information:

- membership details for the Fund as at 30 June 2014
- salary histories of members for the past four annual review days;
- details of Assets for each sub-fund as at 30 June 2014
- information about investment returns after 1 July 2014.

The Fund currently has five defined benefit categories (Categories A to E). A summary of the membership data provided as at 30 June 2014 is set out in table 20.

Table 21. Summary of the membership data provided

	30/06/2014		30/06/2011	
Category	Number	Salaries (\$'000)	Number	Salaries(\$'000)
A	1	82,00	1	75,753
C	43	2,499,000	56	2,940,582
D	3	170,000	5	297,506
E	327	20,621,000	386	22,153,689
Total	374	23,372,000	448	25,467,530

The membership has decreased from 448 to 374. Launceston City Council is no longer admitting new employees to the Fund. This is consistent with the earlier closure of the Fund to new entrants by TasWater employers.

The average rate of salary increase for defined benefit members over the three-year period was 3.6% pa. The salary increase assumption made in the previous actuarial review was 4.0% pa.

Graph 8 shows the number of defined benefit members in the different age bands at 30 June 2014.

Graph 8. Number of defined benefit members in the different age bands

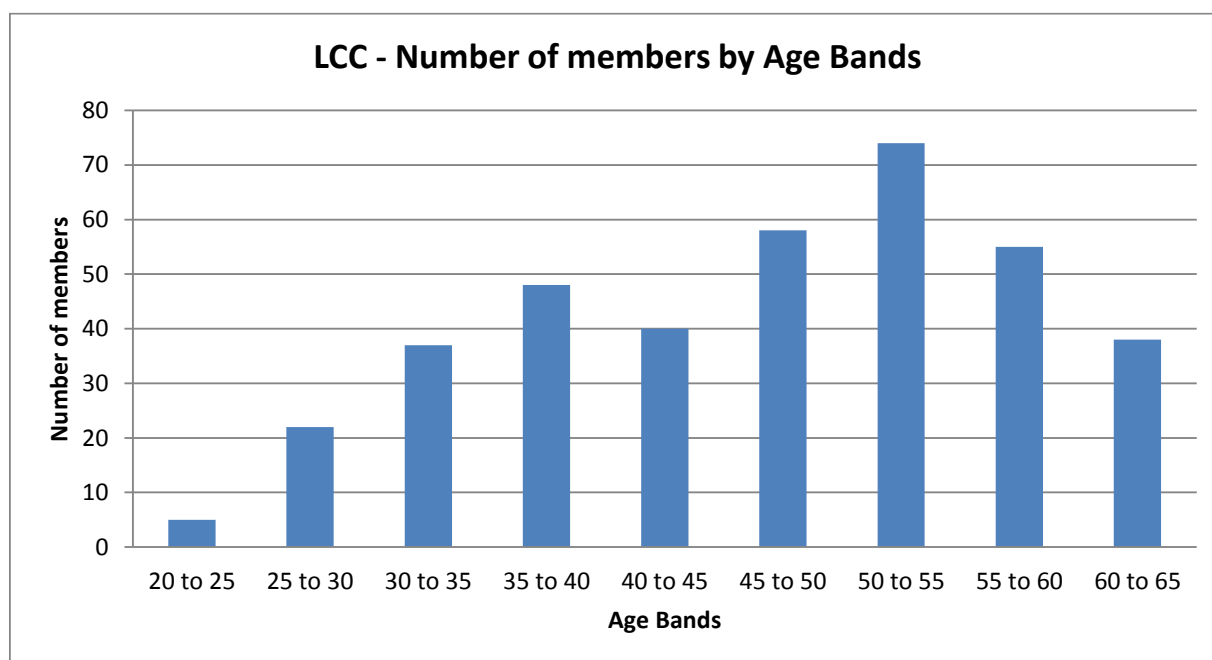


Table 22 shows average age and membership statistics by membership category at the current and previous actuarial review dates

Table 22. Average age and membership statistics by membership category at the current and previous actuarial review dates

	30/06/2014		30/06/2011	
Category	Average Age	Average Membership	Average Age	Average Membership
A	58.00	30.90	55.43	27.93
C	55.40	25.30	54.77	22.55
D	49.30	27.20	49.09	24.88
E	44.80	9.80	43.12	7.56
DB Members	46.10	11.70	44.77	9.88

- the average age of the members at 30 June 2014 was 46.1 years, it has increased by 1.4 years from the previous review
- 25% of members were aged 55 or over and were therefore eligible for retirement benefits with the consent of their employer
- 56% of members were under the age of 50
- 7% of members were under 30.

3.2 Assets

The market value of the net assets as at 30 June 2014, advised by the Scheme personnel, was approximately \$61,695,000. We have taken this amount to be the value of assets available to support the Fund's liabilities.

The Fund is invested in a range of asset classes in accordance with the Trustee's investment policy for the assets supporting defined benefit liabilities, with a target weighting of about 70% to growth assets (such as shares and property) and 30% to defensive assets (such as fixed interest and cash). We consider that this allocation is within the range of alternatives suitable to support the liabilities of the Fund. We, however, recommend that the specific asset allocations be kept under review, now that both sub-funds are closed to new entrants.

3.3 Investment Returns

The average return on the Fund's assets over the three years to 30 June 2014 was 9.8% pa (net of investment management expenses and tax, but before deduction of Fund management expenses). This was greater than the return of 7% pa assumed in the previous actuarial review and has therefore had a positive impact on the financial position of the Fund as at 30 June 2014, compared to that projected in the 2011 investigation.

The investment return for the period from 30 June 2014 up to 31 December 2014 was 3.8% (7.6% pa); this is higher than the 7% pa adopted in our review assumptions. This is expected to have a positive impact on the Fund's financial position.

3.4 Salary Increases

Members who remained in the Fund over the whole three years experienced average salary increases of 3.6% pa compared with the 4.0% pa assumed in the 2011 actuarial investigation.

The lower than expected overall salary increases have had a slight positive impact on the overall financial position of the Fund as the salary related liabilities have increased by less than assumed.

Average salary increases were 3.3% pa and 5.4% pa for Launceston City Council and for TasWater employees respectively. The level of salary increases for Launceston City Council employees therefore had a slightly positive impact on the funding position of Launceston City Council's employee liabilities. The level of TasWater salary increases had a negative impact on the funding position of Taswater's employee liabilities.

A significant part of the LCC salary increases over the three years occurred in the first year. This timing of the salary increases had an adverse impact on the financial position of the Fund.

3.5 Expenses

The Total Fee for the 2013/2014 financial year was equal to 1.21% pa. This comprised 0.30% of Reserve Fee, 0.05% of Asset Consultant Fee, 0.06% of Custodian Fee and 0.80% of Administration Fee. An allowance for expenses at 1.25% pa is assumed, the same as that used in the previous review.

We have allowed for a deduction from the Fund's assumed investment return at the above rates in all future years. We note that the defined benefit administration charge of 0.80% pa is borne by the participating employers and therefore has not been deducted from the crediting rate applied to members. Therefore the reduction in the crediting rate applied to members' benefits is 0.45% pa.

3.6 Interest Crediting Rate

From 1 July 2011, the crediting rate applied to Defined Benefit or Accelerated Benefit accounts changed from a three year smoothed rate to an annual unsmoothed rate. The crediting rate is now based on the investment return on the fund's assets, adjusted for fees and taxes in accordance with the crediting rate policy adopted by the Quadrant Trustee. Therefore, the interest rate credited each year will closely reflect the investment return in that same year. This removes one source of fluctuation in the Fund's future financial position, because movements in the parts of members' benefits that are linked the crediting rates will be more closely aligned to movements in the Fund's asset values.

4. Financial Position

4.1 Measures of Solvency

There are a number of ways to measure the financial position of the Fund at the review date. We have adopted the following measures which are compared to the value of the Fund's assets:

Vested Benefits: The benefits to which members would have been entitled had they voluntarily left service as at 30 June 2014.

Accrued Retirement Benefits: A member's Accrued Retirement Benefit (ARB) is calculated as:

$$\begin{array}{ccc} \text{Accrued Benefit Multiple} & \text{times} & \text{Final Average Salary at at} \\ \text{the valuation date} & & \text{the valuation date} \\ & \text{plus} & \\ & & \text{the member's additional accumulation accounts.} \end{array}$$

The ARB is also subject to a minimum of the vested benefit.

Past Service Liabilities: The present value of that part of members' future expected benefit entitlements which have accrued up to 30 June 2014. This figure is an actuarial estimate, and represents the best estimate of the accrued liabilities of the Fund as at 30 June 2014. The additional accumulation accounts are included at their face values as at 30 June 2014.

Minimum Requisite Benefits (MRBs): The minimum benefit required to be made available to employees in order that the Employer satisfies its superannuation guarantee obligations. If the assets fall below this figure, the Fund is regarded as 'technically insolvent'.

In each case, we have calculated an index by dividing the value of assets by the total of the relevant measure for all members. Table 23 compares these indices at the current review to those calculated at 30 June 2011. The figures include allowance for additional benefits of an accumulation nature.

Table 23. Comparison of Indices at the current review to those calculated 30 June 2011

LCC Consolidated	30/06/2014 Assets = \$61,695,000		30/06/2011 Assets = \$49,743,480	
Measure	Total of Measure (\$'000)	Index (%)	Total of Measure (\$'000)	Index (%)
Vested Benefits*	61,176*	101*	46,923	106
Accrued Retirement Benefits	64,237	96	54,030	92
Past Service Liabilities	61,209	101	53,885	92
MRBs	48,004	129	36,909	135

*. The Vested Benefits assume that Early Retirement Benefits are not limited to the voluntary leaving service benefit. The two sponsoring employers of the Fund have advised when members age 55 or over retire, they are automatically paid the Early Retirement Benefit.

The Vested Benefit measure reported at the annual administration review as at 30 June 2014 and those shown for 2011 assumed that employer consent was required and we were advised that it was only given very occasionally. For comparison with the 2011 details, if we assume the payment of Early Retirement Benefits to all members leaving service over age 55 is limited to the voluntary leaving service benefit, the Vested Benefits decrease to \$60,078 and VBI increases to 103%.

Our comments on the individual indices are:

- The vested benefits remain covered as at 30 June 2014, but the financial position has weakened from 2011 to 2014.
- The past service liabilities have moved from an unfunded position (less than 100%) to a funded position from 2011 to 2014. With an index of 102%, the current financial position is sound.
- The minimum requisite benefits (MRBs) are well covered as they were as at 30 June 2014.
- It should be noted that the investment return for the period from 30 June 2014 up to 31 December 2014 was 3.8% (7.6% pa). This is higher than the 7% pa adopted in our review assumptions and is expected to have a positive impact on the Fund's financial position.

Table 24 shows the indices in respect of each Employer.

Table 24. Indices in respect of each Employer

Employer	LCC 30/06/2014 Assets = \$49,767,000 [^]		TasWater 30/06/2014 Assets = \$11,928,000 [^]	
Measure	Total of Measure (\$)	Index %	Total of Measure (\$)	Index (%)
Vested Benefits*	48,980*	102*	12,196*	97*
Accrued Retirement Benefits	51,381	97	12,857	93
Past Service Liabilities	48,935	102	12,274	97
MRBs	38,634	129	9,369	127

**Early Retirement Benefits are allowed. The Fund employers have advised when a member age 55 or over retires, he/she is automatically paid the Early Retirement Benefit. Previously employer consent was required. If Early Retirement Benefits are limited (as in the 2011 details), the Vested Benefits of LCC and TasWater decrease to \$47,984,000, and \$12,094,000 respectively and VBIs of LCC and TasWater increase to 103% and 99% respectively.*

[^]The Scheme's administrator has advised that for one pending death benefit, the assets were recorded in the LCC's sub-fund while the member records and the attached liabilities were recorded in the TasWater sub-fund. We have adjusted the advised sub-fund asset details and recalculated the funding indices to take this into account.

As at 30 June 2014, the Launceston City Council section of the Fund is in a 'satisfactory financial position' whereas the TasWater is in an 'unsatisfactory financial position'.

Factors contributing to the decline in vested benefit indices for both sub-funds since 2011 include:

- Members retiring early being paid early retirement benefits whereas the contribution rates were set assuming that only resignation benefits would be paid.
- Salary increases being concentrated in the early part of the three year period since the previous actuarial review. It is noted that salary increases for TasWater employees have been higher, on average than those of LCC employees leading to a greater weakening of the financial position of the TasWater sub-fund.

4.2 Measures excluding Accumulation Accounts

Accumulation benefits are usually treated as being fully vested in the members and hence should be regarded as fully funded already. When considering the position of the Fund, it is instructive to reduce the value of the assets for any accumulation benefits, and compare this figure to the liabilities in respect of the defined benefits only.

The funding indices excluding accumulation accounts at 30 June 2014 are shown in table 25.

Table 25. Funding indices excluding accumulation accounts

Measure	LCC Consolidated Index (%)	LCC Index (%)	TasWater Index (%)
Vested Benefits*	101*	102*	97*
Accrued Retirement Benefits	94	95	91
Past Service Liabilities	101	103	96
MRBs	149	152	139

**As in the earlier table above, it is assumed that Early Retirement Benefits are payable to those leaving service after age 55. The Fund employers have advised when members aged 55 or over retire, they are automatically paid the Early Retirement Benefit. If Early Retirement Benefits are assumed to be payable, only subject to employer consent, the VBIs of LCC consolidated, LCC and TasWater increase to 104%, 106% and 98% respectively.*

4.3 Insurance Position

The Fund is protected against adverse death and disablement experience by means of group life insurance arrangements covering the lump sum death and permanent disability (TPD) risks.

Table 26 compares the Fund's asset value and the sums insured as at 30 June 2014 to the total lump sum death and disability benefits. It shows that the Fund's insurance arrangements are insufficient to cover the total death and TPD benefits.

Table 26. Fund's asset value and the sums insured as at 30 June 2014 to the total lump sum death and disability benefits.

LCC Defined Benefit Fund	Death Benefits (\$'000)	TPD Benefits (\$'000)
Consolidated		
Value of Assets	61,695	61,695
Sums Insured	62,342	62,333
Total Assets plus insurance	124,037	124,028
Total Death and TPD Benefits	128,247	128,247
Excess/ (Shortfall)	(4,210)	(4,219)
Shortfall as % Total Death/TPD Benefits	3.3%	3.3%

The Fund is therefore effectively self-insuring about 3.3% of the total death benefits and total permanent disability benefits.

While it may be preferable that there was no shortfall, we consider that this 'unintended' self-insurance is not material in the context of the overall funding position. Therefore in our view the current formula for calculating the sums insured remains appropriate. Modest fluctuations in the level of over- or under-insurance are a normal part of a defined benefit superannuation arrangement.

We note however that while this shortfall persists, there is the potential for the Fund's financial position to be weakened to some extent when a death or TPD benefit is paid. This shortfall will need to be funded by the employers.

4.4 Method of Determining Equitable Shares

If a defined benefit member leaves an Employer's service as a result of retrenchment, 'Reorganisation' (as defined in the Fund's trust deed), chronic ill health or cessation of contract, and the member is not entitled to an Early Retirement Benefit, then 'the Trustee will pay a lump sum equal to the amount calculated by the Trustee after obtaining the Actuary's advice as being the Member's equitable share of the Scheme if he or she remained in Service'.

The Trustee of the City of Launceston Employees Superannuation Fund (the predecessor fund to this Fund) received actuarial advice in 2002 to the effect that a member's 'equitable share' in the above circumstances should be determined as the greater of the member's Early Retirement Benefit and the Leaving Service Benefit. This recommendation was made when Accrued Retirement Benefit Index ('ARBI') was in excess of 100% and was expected to remain so.

In the previous review as at 30 June 2011, given ARBI was below 100% (92%), it was recommended that the equitable share be determined as:

- the member's early retirement benefit determined in accordance with Clause 9.6.2(a) of the Fund's Trust Deed at the date of leaving service (if the member satisfies the requirements of that clause)
- the member's leaving service benefit determined in accordance with Clause 9.6.5(a).

That is, it was recommended that the equitable share to be determined as:

- the usual early retirement benefit (if the member is over early retirement age);
- the usual resignation benefit (if the member is under early retirement age).

By 30 June 2014, the ARBI has improved to 96%. But this was still below the level of 100%. In our view it is appropriate to maintain the previous recommendation and equitable share is again determined as:

- the usual early retirement benefit (if the member is over early retirement age); or
- the usual resignation benefit (if the member is under early retirement age).

However, in any particular case or in general, it is our view that the Trustee could agree to pay an equitable share on the previous basis if it receives additional contributions from the Employer to fund the higher benefits, when a member leaves the Fund. Generally the additional contribution required would be the amount (if any) by which the equitable share exceeded the usual leaving service or early retirement benefit, grossed up for contributions tax.

We will again review the method of determining the equitable share under Clause 9.6.2(b) as part of any actuarial review of the Fund or if the Fund's financial position improves sufficiently that the ARBI exceeds 100% or if the financial position of the Fund significantly weakens.

If a material group of members leaves the Fund in circumstances where an equitable share applies, the interpretation of equitable share should also be reviewed to ensure it remains appropriate. For example, it would be reasonable for the Trustee to take into account the Fund's financial position at that time.

5. Funding the benefits

5.1 General comments

Over the life of the Fund, the ultimate cost to the Employers of providing the benefits will be equal to:

the amount of benefits paid out
plus
the expenses of running the Fund including tax
less
members' contributions and the
return on investments.

The cost of providing the benefits will depend on the Fund's experience in relation to:

- economic factors such as the investment return obtained on the Fund's assets and the rates at which the salaries increase
- factors influencing membership turnover such as mortality and disability, resignation and retirement.

The valuation process involves making assumptions about the likely levels of the above factors in the future. Using these assumptions, we can project the expected future cash flows and benefits for the current members of the Fund. By discounting these cash flows, we derive a present value for the liabilities which we can compare to the value of the current assets.

The ultimate cost to the Employer will not depend on the actuarial assumptions or methods used to project the cash flows and benefits, but on the actual experience of the Fund. The financing method and the actuarial assumptions will however affect the timing of the cost to the Employer.

5.2 Financing Method

There are various financing methods that can be used to determine the Councils' contributions that should be paid over time. The funding method adopted in this review is different from the method used at the previous review (target funding method). This review uses the aggregate funding method to determine the contribution rate adjusted for surplus/deficit and the Employer cost for future service, which equal to 8.9% pa and 9.6% pa respectively for LCC, and 10.8% pa and 9.3% pa respectively for TasWater.

The contribution rate adjusted for surplus/deficit indicates the level of contribution required when surplus/deficits are taken into account and assumptions on which the calculations are based are as expected. If the future investment returns are lower than expected, the surplus (if there is any) will be depleted and this level of contribution will not be sufficient. Therefore, this contribution rate is used as a lower bound for determining the recommended contribution rate for sub-funds with a surplus.

The Employer cost for future service does not take into account any surplus/deficit that has accumulated. It gives an indication of the level of contribution required when there is no surplus/deficit. This is a more prudential measure and it also normally sets the upper bound for determining the recommended contribution rate for sub-funds with a surplus.

Nevertheless, the stability of the Employers' contributions over time will depend on how closely the Fund's actual experience matches the expected experience. If the actual experience differs from that expected, the Employers' contribution rates may need to be adjusted accordingly to ensure the Fund remains on course towards its target of financing members' benefits.

5.3 Assumptions

Taking into account the long-term experience of superannuation funds with investment strategies that are similar to that adopted for this Fund, we have adopted a long-term assumption of 7.0% pa for investment returns (net of investment expenses and taxes on investment earnings, but before deduction of the Fund management expenses).

However, to assess the sensitivity of the results to alternative investment market conditions in the short term, we have considered the three alternative scenarios in table 27.

Table 27. Alternative scenarios

Scenario	2014/15 to 2018/19	2019/20 & later
Unfavourable	5.00% pa	7.00% pa
Medium	7.00% pa	7.00% pa
Favourable	9.00% pa	7.00% pa

We have assumed salary increases of 4.0% pa, inclusive of promotional increases.

The long-term investment return assumption and the salary growth assumption are the same as those adopted for the 2011 actuarial review and maintain the assumed real rate of return assumption at 3.0% pa (before expenses). In addition, the unfavourable and favourable scenarios have been selected to illustrate the impact of a period of under or over performance of the Fund's investments. Relative to the medium scenario, the unfavourable scenario assumes underperformance of 2% pa up to 30 June 2019, while the favourable scenario assumes over-performance of 2% pa up to 30 June 2019.

From 1 July 2011, the crediting rate applied to Defined Benefit or Accelerated Benefit accounts changed from a three year smoothed rate to an annual unsmoothed rate. Therefore we have assumed that after that date, the interest credited to members' accounts will be equal to the investment return (after adjustment for the administration fees borne by members).

The decrement rates used in this review are the same as the ones used in the previous review as at 30 June 2011 in respect of retirement and resignation. A table of death and TPD rates, similar to those applied at the previous valuation, has been adopted.

Appendix B (Benefits for defined benefits) sets out the valuation basis in more detail.

6. Employer contributions

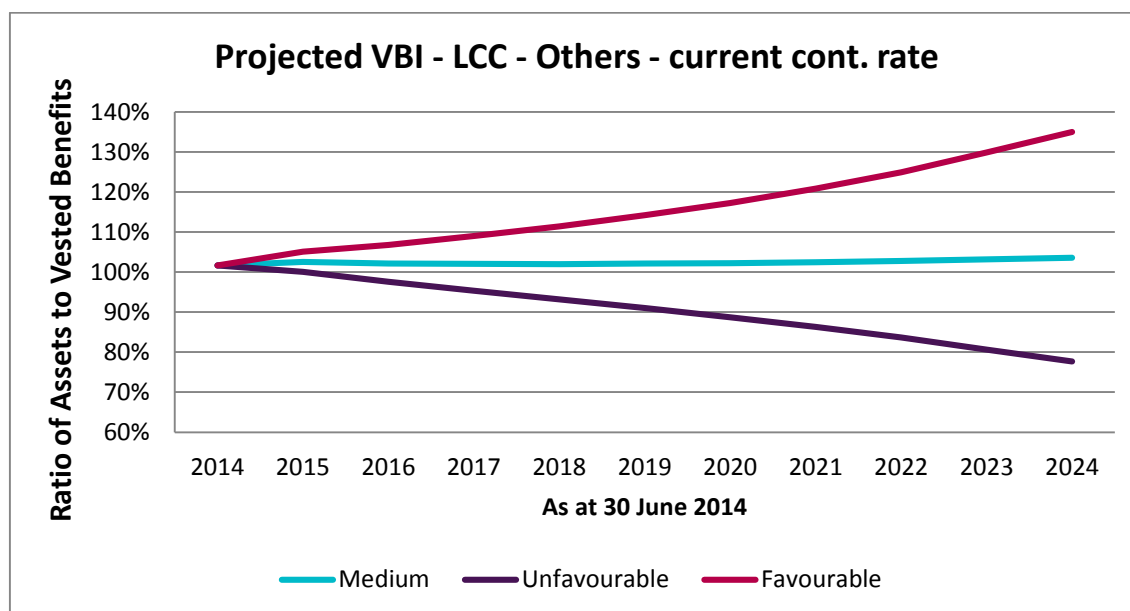
6.1 Projection of Funding Indices

For this review, we have projected the VBI in respect of Launceston City Council members separately from the VBI of TasWater members. This approach is possible because the Scheme's administrator has been recording two separate asset sub-pools, one in respect of Launceston City Council and one in respect of TasWater, since the relevant employees were transferred on 1 July 2009.

Using these separate assets values as a base, we used VBI projections to test and fine-tune the contribution rates derived from applying the aggregate funding method for each Employer section of the Fund. Launceston City Council

Graph 9 shows the projected level of the Vested Benefit Index ('VBI') (including member's accumulation accounts) over the next 10 years, assuming that the Council continues to contribute at the current rate of 10% of members' salaries.

Graph 9. Projected level of the Vested Benefit Index

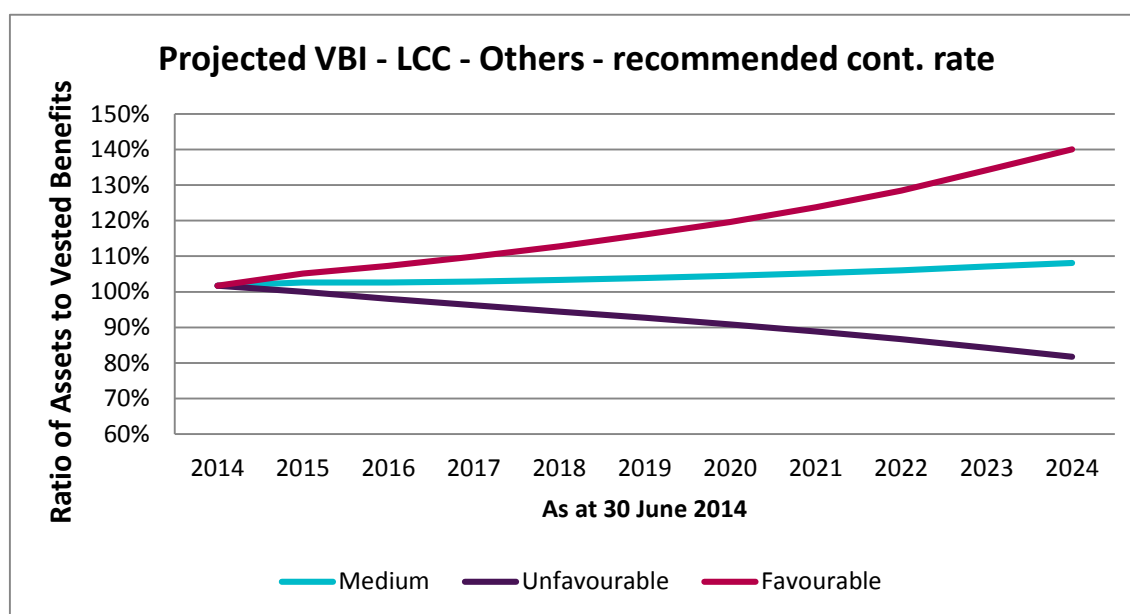


The projected VBI is clearly dependent on investment returns. Under the medium return scenario of 7% pa, the VBI remains flat for many years then slightly strengthen in later years. Lower investment returns that are on average 5% pa over the next three years will lead to the VBI falling below 100%. Conversely, higher investment returns could lead to strengthening of the VBI.

Taking account of the calculated employer cost of future accruing benefits, the current and projected levels of the funding indices under the investment return scenarios considered in this report and the current state of world investment markets, we recommend that the LCC contribution rate be increased to 11.0% of salaries from 1 July 2015.

Graph 10 shows the projected level of the VBI over the next 10 years, assuming that the Council increases contribution rate to 11% of members' salaries.

Graph 10. Projected level of the VBI over the next 10 years



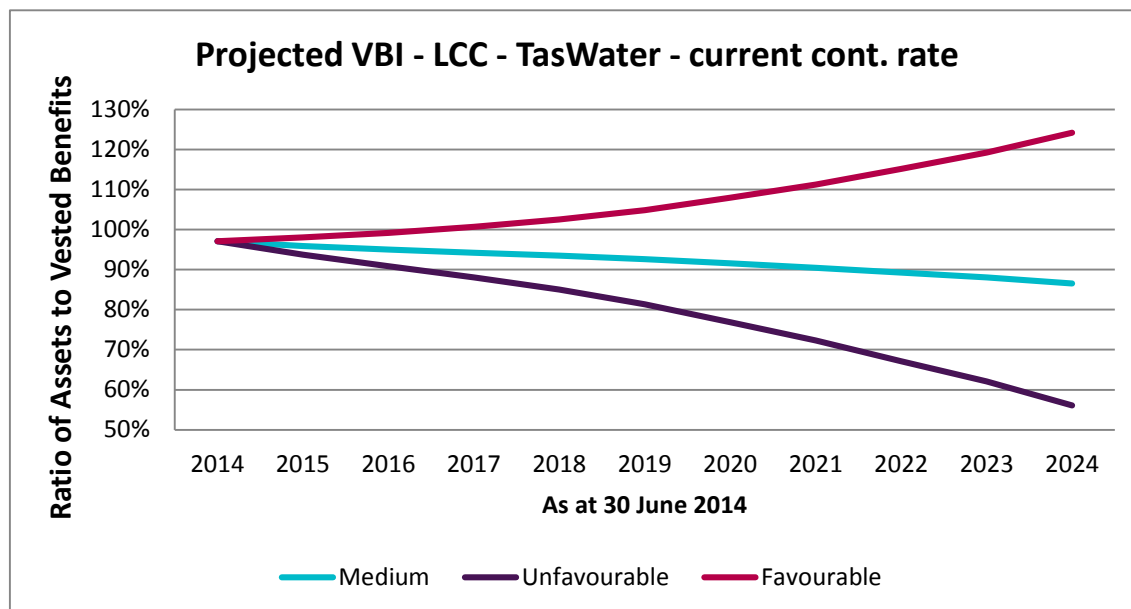
The projected VBI is clearly dependent on investment returns. Under medium return scenario of 7% pa, the VBI increases gradually over the years and it will stay above 100% until the next actuarial review as at 30 June 2017. Lower investment returns that are on average 5% pa over the next three years will still lead to the VBI falling below 100% but will result in a smaller shortfall than the current contribution rate. Conversely, higher investment returns could lead to strengthening of the VBI.

We have been advised that the LCC employees are currently subject to an Enterprise Agreement specifying a cap of 2% pa on salary increases, as opposed to the 4% pa increase assumed in the contribution calculations and the projections. With this limit on salary increases, the 'favourable' results in the graph above are likely to be a better guide to the expected future moves in the financial position of the sub-fund than the 'medium' results. However, given the current modest level of the VBI, and the current level of world investment markets, we believe that the recommended contribution rate is appropriate until the next actuarial review is completed.

6.2 TasWater

Graph 11 shows the projected level of the VBI over the next 10 years, assuming that TasWater continues to contribute at the current rate of 9% of members' salaries.

Graph 11. Projected level of VBI over the next 10 years, assuming TasWater contributes 9% of members salaries

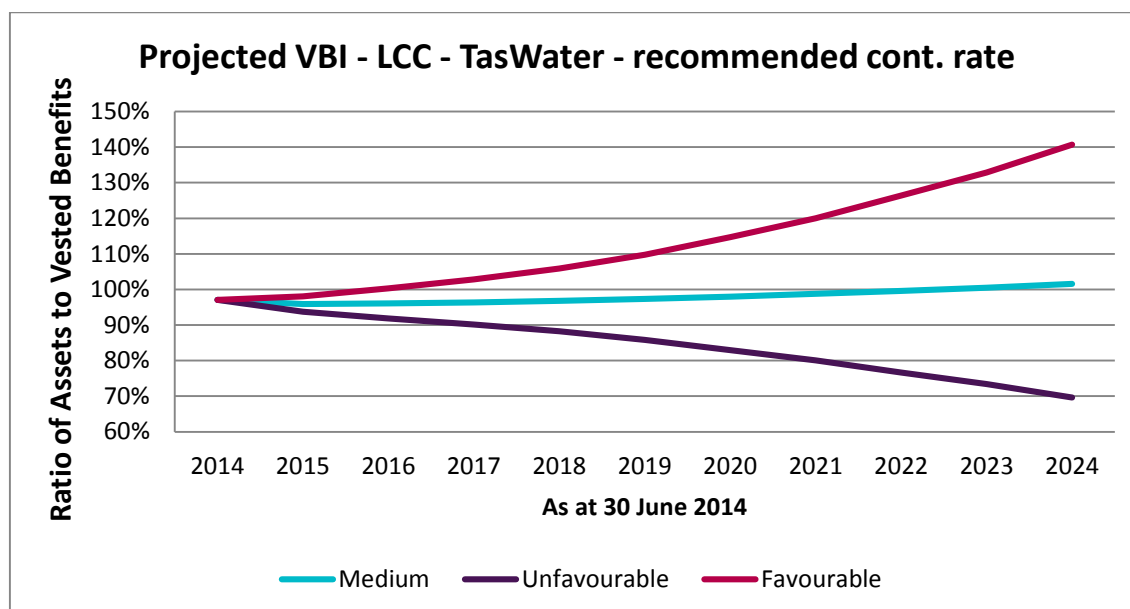


The projection indicates that the current contribution rate of 9% pa will not be sustainable for TasWater. Under the medium return scenario of 7% pa, the VBI continues to decrease from its current 'unsatisfactory financial position'. Even under the favourable return scenario of 9% pa, the VBI will only recover to a satisfactory financial position (VBI greater than 100%) over the next three years until the next actuarial review date as at 30 June 2017.

Taking account of the calculated employer cost of future accruing benefits, the current and projected levels of the funding indices under the investment return scenarios considered in this report, we recommend that the employers of TasWater increase its contribution rate to 12.5% of salaries from 1 July 2015. In setting this contribution rate we have also considered the projected financial position of the TasWater sub-fund of the HCC Fund.

Graph 12 shows the projected level of the VBI over the next 10 years, assuming that TasWater increases its contribution rate to 12.5% of members' salaries from 1 July 2015.

Graph 12. Projected level of the VBI over the next 10 years, assuming that TasWater increases its contribution rate to 12.5%

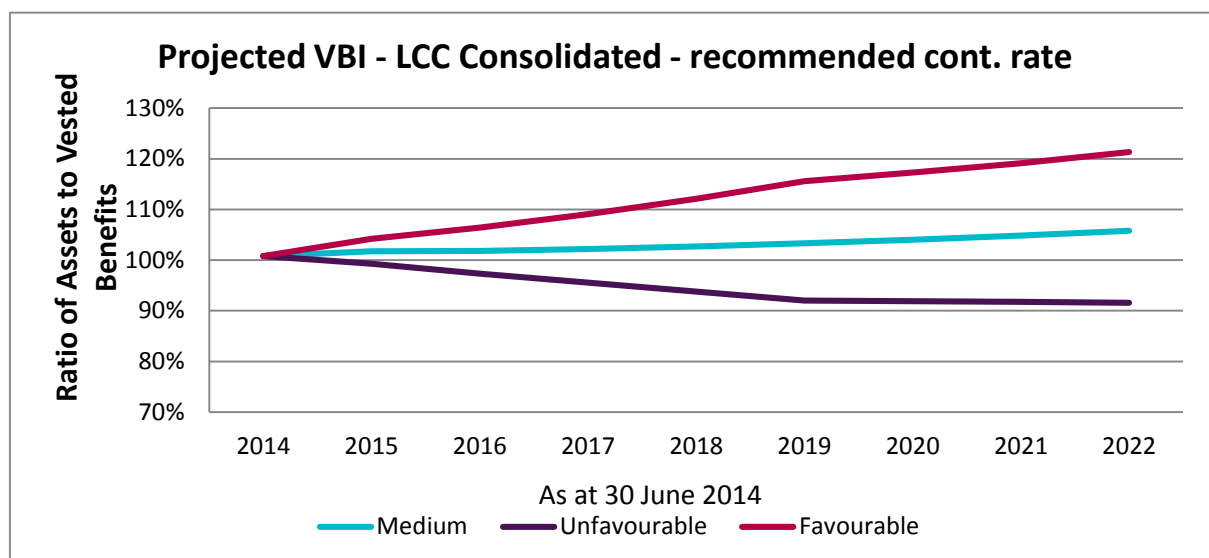


The projection indicates that under the recommended contribution rate of 12.5% pa and the medium return scenario of 7% pa, the VBI drops slightly the first year then remains reasonably flat for future years. The sub-fund will remain in an 'unsatisfactory financial position' over the next three years until the next actuarial review as at 30 June 2017 but the TasWater sub-fund of the HCC fund will be in a strong financial position over those three years. We have also been advised that the employer is negotiating an Enterprise Agreement (EA), including 2.8% pa salary increases. If the EA is finalised with 2.8% pa salary increases, the projected VBI will fall between the medium and the favourable results in the graph above allowing a return to a satisfactory financial position by 30 June 2017.

6.3 Projection of Funding Position – All Employers

Graph 13 illustrates the projected VBI for all employees, assuming future employer contributions are made in accordance with our recommendations above. The projected VBI is shown for each of the three investment return scenarios (unfavourable, medium and favourable) discussed in Section 5.3, above.

Graph 13. Projected VBI for all employees*



*The chart above has taken into account early retirement benefit.

We note that the progression of the VBI clearly depends on the level of investment returns assumed. The projections suggest that if an investment return of 7% pa is maintained (as assumed in the medium scenario), the VBI is projected to gradually increase over the years. As noted above, LCC has completed an EA with its employees specifying 2% pa salary increases and TasWater is finalising an EA with its employees including 2.8% pa salary increases. Thus if investment returns are as assumed over the next three years, the projected VBIs are expected to fall between the 'medium' and 'favourable' results in the graph above.

Lower investment returns that are on average 5% pa over the next three years may lead to the VBI falling below 100%. Conversely, investment returns higher than 7% could lead to a strengthening of the VBI.

We understand that Launceston City Council is no longer admitting new employees to the Fund. This is consistent with the earlier closure of the Fund to new entrants by TasWater employers. The projection does not allow the flow of new entrants into the Fund.

6.4 Recommended Employer Contributions

Taking account of the calculated employer cost of future accruing benefits, the current and projected levels of the funding indices under the investment return scenarios considered in this report, we recommend that Launceston City Council contributions to the Fund increase to a rate of 11.0% of salary, and that TasWater increase its contribution rate to 12.5% of salary, both from 1 July 2015. The rationale for the increase for LCC is the small current margin of assets over vested benefits and the current state of world investment markets. For TasWater, the higher rate is designed to improve the current VBI of 99%.

As alternatives to the above recommendations acceptable alternatives include:

- for LCC, either:
 - increasing its contribution rate to 10.5% from 1 July 2015 and to 11.5% from 1 July 2016; or

- paying a lump sum contribution and adjusting the future employer contribution rate to a level agreed in writing between the Trustee and the employer, after seeking advice from the Fund actuary.

for TasWater increasing its contribution rate to 11.5% from 1 July 2015 and 13.0% from 1 July 2016.

Noting that the future financial position of the Fund may vary from the projected levels (for example as a result of higher or lower investment returns), we also recommend that the Trustee continues its recent practice of briefly reviewing the recommended contribution rates after 30 June each year, to confirm they remain appropriate. If the Fund's financial position is stronger than expected, it may be appropriate for the employers to pay lower contributions than those recommended above, while if the financial position significantly weakens it may be necessary to pay higher contributions.

In addition the Employers should continue to contribute:

- Contributions to defined benefit members' accumulation accounts under the Employer's Enterprise Agreement (currently 6% of salary), for those permanent employees who have these contributions paid to this Fund.
- Member contributions as required under the Fund's rules for defined benefit members, whether from after-tax salary, by salary sacrifice or deemed contributions (grossed up for contributions tax where appropriate).
- Contributions in accordance with the Enterprise Agreement (currently 12% of salary) in respect of those temporary and casual employees who have these contributions paid to accumulation accounts in this Fund.
- Any voluntary member or Employer contributions.

Finally, we note the comment in the previous actuarial review report that the basis for determining the 'equitable share', payable to retrenched members, may need to be varied in future from time-time, to ensure that it remains appropriate.

6.5 Next Actuarial Review

The next full actuarial review into the Fund should be conducted with an effective date no later than 30 June 2017, as required under the SIS Regulations.

Yours sincerely,



GEOFF MCRAE, B.Sc.

Fellow of the Institute of Actuaries of Australia

Rice Warner

Appendix A BENEFIT SUMMARY

Full details of the benefit provisions of the Fund are contained in the trust deed of the Quadrant Superannuation Scheme. A summary of the main provisions is set out below.

A.1 Membership

There are six categories of Fund membership – Categories A, B, C, D and E in the Defined Benefit Section and Category F in the Accumulation Section. Eligibility for the various categories is as follows:

<i>Category</i>	<i>Description</i>
A	Male member whose Date of Admission to the Fund was prior to 26 August 1985 and who is not a Category C member.
B	Female member whose Date of Admission to the Fund was prior to 26 August 1985 and who is not a Category D member.
C	<ul style="list-style-type: none">Female members whose Date of Admission to the Fund was after 30 June 1989 and prior to 1 July 1993.Male members whose Date of Admission to the Fund was prior to 26 August 1985 and who elected prior to 23 January 1986 to make contributions to the Fund equal to 6% of their salary.Male members whose Date of Admission to the Fund was after 25 August 1985 and prior to 1 July 1993. who did not transfer to Category E.
D	<ul style="list-style-type: none">female members whose Date of Admission to the Fund was after 25 August 1985 and prior to 1 July 1989.female members whose Date of Admission to the Fund was prior to 26 August 1985 and who elected prior to 23 January 1986 to make contributions to the Fund equal to 6% of their salary. who did not transfer to Category E.
E	<ul style="list-style-type: none">all Defined Benefit members whose Date of Admission to the Fund or the Fund is after 30 June 1993.category C or D members who elected to transfer to Category E.
F	Accumulation Section members.

Categories A, B, C and D are closed to new entrants and there are no remaining Category B members.

A.2 Definitions

A.2.1 Final Average Salary (FAS)

For Category A, B, C and D members, FAS is the salary at the date of retirement.

For Category E members, FAS is calculated as the annual average salary received by the member in the two years immediately preceding retirement.

A.2.2 Normal Retirement Date

The member's 65 birthday.

A.2.3 Eligible Service

The period of Service as a Member of the Fund (and any previous fund) calculated in years and complete months.

A.3 Schedule A Account

The accumulation of the Retirement Allowance transferred to the Fund from the City of Launceston Voluntary Retirements Fund with interest at the Fund Earning Rate.

A.4 Accumulated Credit

The accumulation of any rollovers, Superannuation Guarantee or Award contributions and Member or Voluntary Council contributions (excluding the Schedule A Account) paid by (or in respect of) the member to the Fund and the Fund with interest at the Fund Earning Rate.

A.5 Contributions

A.5.1 Member Contributions

Defined Benefit Section - The Members contribute at:

- 5% of Salary for Category A and B members
- 6% of Salary for Category C, D and E members (for a maximum of 44 years of Eligible Service).

Some members' contributions are paid by the Employers but are deemed to be paid by the member. Accumulation Section. Category F members are not required to contribute.

All members may make additional voluntary contributions.

A.5.2 Employer Contributions

The Employers makes allocated contributions in respect of most members under either Superannuation Guarantee or Award requirements. The Employers may also make additional voluntary contributions.

The Employers also contributes the balance required to meet the cost of the defined benefits that are not allocated to individual members but are applied as required to provide benefits. The actual cost will depend on the end benefit paid to the member, and the financial experience of the Fund.

A.6 Benefits For Defined Benefit Section

A.6.1 Normal Retirement Benefit

A benefit is payable to a Member upon retirement at the Normal Retirement Date of a lump sum equal to the sum of:

- Accrual Rate multiplied by Eligible Service multiplied by Final Average Salary.
- The Schedule A Account (if any).

The Accrual Rate is 15.5% for Categories A, B, C and D and 16.5% for Category E. This benefit is subject to a minimum of the Resignation Benefit.

A.6.2 Early Retirement Benefit

All members may retire, with the consent of the Employer, at any time within 10 years of the Normal Retirement Date. Female members whose Date of Admission is prior to 1 July 1989 may also retire, with the consent of the Employer, within 15 years of their Normal Retirement Date.

The benefit is calculated as:

- Accrual Rate multiplied by Eligible Service multiplied by Final Average Salary, plus
- The Schedule A Account (if any), less
- For Category A and B members only, Accrual Rate multiplied by the period from the date of actual retirement to the Normal Retirement Date multiplied by Final Average Salary.

The Accrual Rate is 15.5% for Categories A, B, C and D and 16.5% for Category E. This benefit is subject to a minimum of the Resignation Benefit.

A.6.3 Late Retirement Benefit

If a member retires after his Normal Retirement Date, the benefit payable is the benefit which would have been payable had he retired on his Normal Retirement Date, plus interest at the Fund Earning Rate to the date of late retirement.

A.6.4 Pension Option

Members who joined the Fund before 1 July 1996 are entitled to take a pension in lieu of the salary-related lump sum benefit on normal or early retirement.

The pension benefit is calculated as:

- 1.25% multiplied by Eligible Service multiplied by Final Average Salary, less
- For Category A and B members only, 1.25% multiplied by the period from the date of actual retirement to the Normal Retirement Date multiplied by Final Average Salary.

The pension has a five year guarantee period, a 2/3 reversion to the Spouse and may be increased from time to time at the discretion of the Trustee.

A member entitled to a pension is also entitled to commute the pension using the factors set out in table 28 (if commutation occurs before any pension instalments are made):

Table 28. Pension factors

Category				
Age	A	C	D	E
50-55	14.00	12.40	15.10	12.40
56	14.00	12.40	14.83	12.40
57	14.00	12.40	14.56	12.40
58	14.00	12.40	14.29	12.40
59	14.00	12.40	14.02	12.40
60	14.00	12.40	13.75	12.40
61	13.75	12.40	13.48	12.40
62	13.40	12.40	13.21	12.40
63	13.10	12.40	12.94	12.40
64	12.75	12.40	12.67	12.40
65	12.40	12.40	12.40	12.40

If an entitlement to a pension is immediately commuted to a lump sum, the effective Rate of Accrual can be as high as 18.9% for Category D and 17.5% for Category A.

A.6.5 Death Benefit

On the death of a member prior to Normal Retirement, the amount payable is the normal retirement benefit that would have been payable had the member remained in Service of the Employer with unaltered Salary until Normal Retirement Date. This benefit is subject to a minimum of the Resignation Benefit.

A.6.6 *Disablement Benefit*

On Total and Permanent Disablement, the amount payable is equal to the death benefit.

A.6.7 *Resignation Benefit*

Upon resignation, the benefit payable is equal to a return of the member's contributions together with interest at the Fund Earning Rate increased by 100%.

The benefit may be increased to an amount not exceeding the Early Retirement benefit.

A.6.8 *Retrenchment Benefit*

The Trust Deed provides that on retrenchment members are entitled to the Member's equitable share of the Fund.

A.6.9 *Member's Accumulated Credit*

In addition to the above benefits, a Member is entitled to his Accumulated Credit.

A.6.10 *Surcharge*

Any surcharge tax in respect of a member is repaid to the Fund by a member via a reduction in the member's benefit of the accumulation of surcharge taxes paid accumulated with interest at the Fund Earning Rate.

A.6.11 *SG Minimum Benefit*

All benefits described above are subject to a minimum of the Minimum Requisite Benefit defined in the Benefit Certificate prepared by the Fund's actuary.

A.7 *Benefits For Accumulation Section*

Accumulation members receive a lump sum benefit, upon exit for any reason, equal to the Accumulated Credit.

On death and total and permanent disablement, an additional amount is payable equal to the sum insured (if any) payable under the group insurance policy.

Appendix B Summary of valuation basis

Table 29. Summary of valuation basis

Method	Aggregate funding												
Economic Assumptions													
Investment Return	<p>A long-term assumption of 7.0% pa (net of investment expenses and taxes on investment earnings, but before deduction of Fund management expense).</p> <p>However, to assess the sensitivity of the results to alternative investment market conditions, in the short term we have assumed the three scenarios in the table below will apply.</p> <table><tr><th>Scenario</th><th>2014/15 to 2018/19</th><th>2019/20 & later</th></tr><tr><td>Unfavourable</td><td>5.00%</td><td>7.00%</td></tr><tr><td>Medium</td><td>7.00%</td><td>7.00%</td></tr><tr><td>Favourable</td><td>9.00%</td><td>7.00%</td></tr></table> <p>For purposes of the statements required in accordance with AAS25 (see appendix C), we have used the assumptions in the ‘medium’ scenario above.</p>	Scenario	2014/15 to 2018/19	2019/20 & later	Unfavourable	5.00%	7.00%	Medium	7.00%	7.00%	Favourable	9.00%	7.00%
Scenario	2014/15 to 2018/19	2019/20 & later											
Unfavourable	5.00%	7.00%											
Medium	7.00%	7.00%											
Favourable	9.00%	7.00%											
Salary Increase Rate	4.0% pa inclusive of promotional increases.												
Fund Management Expenses	1.25% p.a. In our valuation, this expense has been allowed for by reducing both the investment return. Crediting Rates are reduced by only 0.45% as employers meet part (0.80%) of the cost.												
Crediting Rate	<p>From 1 July 2011, the crediting rate applied to Defined Benefit or Accelerated Benefit accounts changed from a three year smoothed rate to an annual unsmoothed rate.</p> <p>Therefore based on the investment return scenarios noted above, and after deducting the fund management expenses noted above, the assumed crediting rates are:</p> <table><tr><th>Scenario</th><th>2014/15 to 2018/19</th><th>2019/20 & later</th></tr><tr><td>Unfavourable</td><td>4.55%</td><td>6.55%</td></tr><tr><td>Medium</td><td>6.55%</td><td>6.55%</td></tr><tr><td>Favourable</td><td>8.55%</td><td>6.55%</td></tr></table>	Scenario	2014/15 to 2018/19	2019/20 & later	Unfavourable	4.55%	6.55%	Medium	6.55%	6.55%	Favourable	8.55%	6.55%
Scenario	2014/15 to 2018/19	2019/20 & later											
Unfavourable	4.55%	6.55%											
Medium	6.55%	6.55%											
Favourable	8.55%	6.55%											
Asset Valuation	Market values as provided by the Scheme administrators.												

B.1 Taxation:

Investment returns are assumed to be net of investment fees and investment tax. The contribution tax rate is assumed to be 15% of concessional contributions.

We have assumed that no further surcharge assessments are received by the Trustee after 30 June 2011.

B.2 Decrement Rates:

A summary of the decrements rates assumed in the investigation is set out in table 29.

Table 30. Summary of decrement rates assumed

Expected Number of Exits pa per 100,000 Members				
Age	Death	Disablement	Withdrawal	Retirement
20	111	18	16,300	0
25	111	19	12,800	0
30	113	21	9,900	0
35	118	33	7,500	0
40	139	57	7,000	0
45	208	116	4,700	0
50	372	265	2,800	0
55	670	630	0	7,500
56	749	749	0	5,800
57	837	899	0	6,100
58	930	1,067	0	6,900
59	1,034	1,279	0	7,800
60	1,148	1,522	0	12,000
61	1,271	1,813	0	25,000
62	1,407	2,176	0	12,000
63	1,554	2,558	0	18,000
64	1,718	3,008	0	35,000
65	0	0	0	100,000

B.3 Pension Option:

Members who joined the Fund before 1 July 1996 have the option to take their benefit as a pension. They also have the option to commute the pension to an immediate lump sum. In valuing this option, we have assumed that members will elect either their normal lump sum, or (if greater), a lump sum equal to the value of their commuted pension benefit. We have assumed that no members elect to receive a pension.

Appendix C Summary of actuary's report for the purposes of Australian accounting standard AAS25

C.1 LCC Defined Benefits Fund

We have prepared this statement for the purposes of Australian Accounting Standard AAS25 relating to superannuation funds reporting, at the request of the Trustee of the Quadrant Superannuation Scheme ('the Scheme').

C.2 Applicable Fund

The statement is provided in respect of the LCC Defined Benefits Fund ('the Fund') which is a sub-fund of the Scheme.

C.3 Purpose

The purposes of this statement are:

- To provide the Trustee with a summary of my report on the most recent actuarial investigation of the Fund so that the Trustee can fulfil the requirements of paragraphs 63 and 64 of AAS25.
- To specify the value of 'Accrued Benefits' for the Fund, such value being determined in accordance with AAS25, and to describe the basis on which that value has been determined.

C.4 Effective Date

The effective date of this statement is 30 June 2014.

C.5 Summary Report

The summary of the actuarial report is provided in Addendum 1 to this statement.

C.6 Value of Accrued Benefits

Paragraph 50 of AAS25 states that:

"Accrued Benefits" of a defined benefit fund shall be measured ... using actuarial assumptions and valuations where appropriate, as the present value of expected future payments arising from membership of the plan up to the measurement date. The present value of expected future benefit payments shall be determined by discounting the gross benefit payments at a current, market determined, risk-adjusted discount rate appropriate to the plan".

The methods used for attributing benefits to membership of the Fund up to the Effective Date are set out in Addendum 2 (Actuarial assumptions and methods used to determine value of accrued benefits for AAS25 purposes).

The assumptions used to determine the value of the Accrued Benefits are summarised in Addendum 2. These assumptions are similar to those adopted for the previous actuarial review of the Fund as at 30 June 2011

The value of Accrued Benefits at the effective date was as shown in table 30.

Table 31. Value of accrued benefits

	Value of Accrued Benefits as at 30/06/2014 (\$'000)
Present Value of Defined Benefits	41,198
Accumulation Benefits	20,011
Accrued Benefits	61,209

C.7 Compliance

The amount of Accrued Benefits shown above has been calculated. This statement and the attached summary report have been prepared in a manner consistent with Professional Standards and Guidance Notes issued by the Institute of Actuaries of Australia.



GEOFF MCRAE, B.Sc.

Fellow of the Institute of Actuaries of Australia

17 March 2015

Rice Warner
Level 1, 2 Martin Place
Sydney NSW 2000

The effective date of the most recent review of the Fund was 30 June 2014 and covered the three year period to that date. The review was undertaken by Geoff McRae, Fellow of the Institute of Actuaries of Australia, in his capacity as an employee of Rice Warner, and the results of the actuarial review are set out in a report dated 19 December 2014.

- As at 30 June 2014, the net realisable value of the assets of the Fund, based on information supplied by the Scheme administrators, amounted to approximately \$61,695,000. This is also the value of assets used in determining the recommended contribution rate.
- The Fund has no liability in respect of postponed retirements or deferred benefits for former members or dependants.
- The present value of accrued benefits as at 30 June 2014 for the purpose of Australian Accounting Standard AAS25 was approximately \$61,209,000. This amount also constitutes the 'value of the liabilities in respect of accrued benefits' as defined in Division 9.5 of the Superannuation Industry Supervision (SIS) Regulations. A summary of the method and assumptions used to determine this value is set out below. The above figure includes accumulation liabilities of approximately \$20,011,000.
- The total as at 30 June 2014 of members' vested benefits for the purpose of Australian Accounting Standard AAS25 (i.e. early retirement benefits payable to over age 55), amounted to \$61,176,000*.
- The ratios of the assets to these benefit measures are as follows:

- Present value of accrued benefits	101%
- Vested benefits*	101%*
- The actuarial review was carried out using the Aggregate Funding method, supplemented by projecting the Fund's assets and total vested benefits on the basis of the actuarial assumptions made. Contribution rates were determined after considering the future levels of the vested benefit index arising from the payment of the contribution rates derived from the Aggregate Funding method. As a minimum, we required that the assets of the Fund be expected to exceed vested benefits at all times until 30 June 2017.
- The review disclosed that the Fund was in a satisfactory financial condition at 30 June 2014 and the Actuary recommended that with effect from 1 July 2015 Launceston City Council contributes at 11.0% of employee salaries (or pays a lump sum contribution and adjusts the future employer contribution rate to a level agreed in writing between the Trustee and the employer, after seeking advice from the Fund actuary) and that TasWater contributes at 12.5% of employee salaries, unless the Fund's financial position changes such that a different contribution rate is appropriate. The next actuarial review is due as at 30 June 2017. At that time, the level of Employer contributions will be reviewed again.

* The Fund employers have advised when members aged 55 or over retire, they are paid the Early Retirement Benefit. Previously employer consent was required. If Early Retirement Benefits, paid to each member over age 55 leaving service, are assumed to be limited to the voluntary resignation benefit, the Vested Benefits decrease to \$60,078,000 and VBI in to 103%.

Addendum 2 - actuarial assumptions and method used to determine the value of accrued benefits for AAS25 purposes

Actuarial Assumptions

Economic Assumptions

Investment Return:	7.0% p.a. (net of investment expenses and taxes on investment earnings). After deducting the Fund management expenses noted below, the assumed investment return is 5.75% p.a.
Salary increases:	4.0% p.a. (including promotional increases).
Fund Management Expenses:	1.25% p.a. In our valuation, this expense has been allowed for by reducing the investment return.
Crediting Rate:	6.55% p.a.

Leaving Service Rates

Assumptions regarding the rates at which members will leave the Fund on account of retirement, death, disablement and resignation have been revised at this actuarial investigation. These assumptions were based on the experience of the Fund and other similar funds within the Quadrant Superannuation Scheme. Further details can be found in the report on the actuarial review of the Fund as at 30 June 2014.

Method of Attributing Benefits to Past Membership

The methods used for attributing benefits to past membership are as follows:

- Defined Benefits on Retirement: actual accrual approach (based on the member's accrued retirement multiple at the effective date and the member's salaries projected to the assumed date of retirement)
- Defined Benefits on Death and Disablement: proportionate approach (proportion of total projected benefit amount, in the ratio of membership of the Fund to the effective date divided by membership to the projected date of death/disablement).
- Resignation Benefits: based on contributions received up the effective date only, increased with interest to the projected date of payment of the benefit (as applicable), and using the vesting factor (if any) applicable at the projected date of resignation.
- Accumulation benefits: the accumulated balance in the accumulation account at the effective date.

Where the total vested benefits for all of the members in the Fund exceed the value of the Accrued Benefits determined using the above method, a minimum of the total vested benefits has been applied.

Appendix D Actuary's statement for the purposes of the superannuation industry (supervision) regulations

D.1 LCC Defined Benefits Fund

We have conducted an actuarial review of the LCC Defined Benefits Fund ('the Fund') as at 30 June 2014. The review was based on 374 active members with annual superannuation salaries of approximately \$23,372,000. Various checks were carried out in relation to the data and we have no reason to believe the data used is not correct. In our opinion:

- The value of assets of the Fund was adequate to meet the liabilities of the Fund in respect of vested benefits as at 30 June 2014, with the result that the Fund was in a 'satisfactory financial position' as defined in the SIS Regulations.
- The value of the assets of the Fund was adequate to meet the value of the liabilities of the Fund in respect of the present value of accrued benefits as at 30 June 2014.
- Based on the assumptions used, and assuming the Employer contributes at the levels described below, the value of the assets will continue to be adequate to meet the value of the liabilities of the Fund in respect of vested benefits at all times during the period up to 30 June 2017. We therefore expect the Fund to remain in a 'satisfactory financial position' as defined in the SIS Regulations.

The Fund is used for Superannuation Guarantee purposes and is subject to the funding and solvency provisions of Division 9.3 of the SIS Regulations. All funding and solvency certificates required under Division 9.3 have been obtained for the period from the date of the last review to 30 June 2014 and we expect to be able to certify the solvency of the Fund in any funding and solvency certificate that may be required under the Regulations during the period from 1 July 2014 to the next actuarial review.

We recommend that, with effect from 1 July 2015, Launceston City Council contributes at 11.0% of employee salaries (or pays a lump sum contribution and adjusts the future employer contribution rate to a level agreed in writing between the Trustee and the employer, after seeking advice from the Fund actuary) and that TasWater contributes at 12.5% of employee salaries, plus deemed member contributions grossed up for contributions tax until the results of the next actuarial review due as at 30 June 2017 become available, unless the Fund's financial position changes such that different contribution rates are appropriate.



GEOFF MCRAE, B.Sc.
Fellow of the Institute of Actuaries of Australia

17 March 2015
Rice Warner