Willis Towers Watson

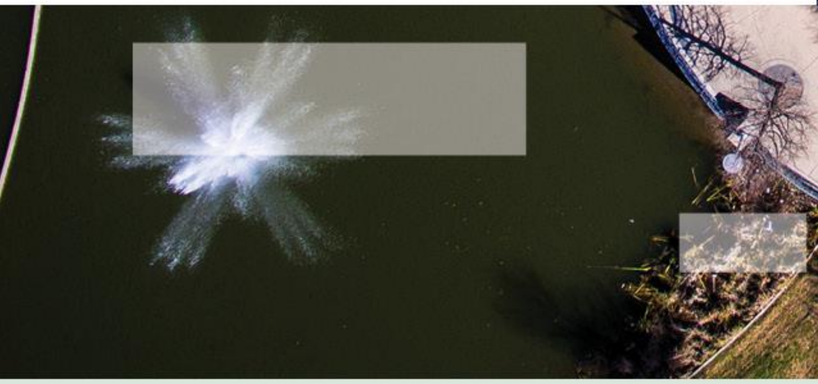
Local Authorities
Superannuation Fund

Report on the Actuarial Investigation as at 30 June 2017

The City of Melbourne Plan

Statement of Advice

1 November 2017



Towers Watson Australia Pty Ltd
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Section 1: Executive Summary

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

1.2 Please refer to Section 2 for the detail of the reliances and disclaimers in respect of this advice.

Results of previous actuarial investigation

1.3 The previous actuarial investigation was conducted by Matthew Burgess, FIAA, on behalf of Russell Employee Benefits Pty Ltd as at 30 June 2014. The results of that valuation were published in a report dated 10 December 2014.

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

a A contribution rate of 13% (inclusive of 1% salary continuance cover) of salaries for Division D members;

b If the VBI is below 100% and in any event upon retrenchment, top-up amounts for exiting members equal to the following amount increased for contribution tax:

Benefit Payment less (Vested Benefit x VBI)

Top-up payments were to be calculated and invoiced quarterly in arrears. Top-up payments were required for all retrenchments (VBI capped at 100%), but for other exits only when the VBI is below 100%. Benefit payments exclude the amount of any insurance proceeds.

c City of Melbourne also needed to contribute the amount of members' salary sacrifice contributions.

d Under the valuation assumptions these contributions were expected to be more than required to meet funding requirements, and following discussions with City of Melbourne and Vision Super, we recommended that Vision Super consider whether a lower risk investment strategy was appropriate at that time.

e We also recommended that the Board consider a plan to reduce the exposure to illiquid assets in the COM plan to zero over time given the maturity of the plan and the possibility of large benefit payments. The illiquid assets have not reduced materially over the three years to 30 June 2017. This is not inappropriate given that the illiquid assets can be transferred to other parts of the Fund. It is very important that other assets within the Fund continue to act as liquidity provider for the COM plan. Vision Super should be mindful of the maturity of the COM plan and the need for full liquidity overtime.

f We also recommended that Vision Super review the insurance policies, and update where necessary, to ensure it was satisfied that any self-insurance was not material. Upon reviewing the most recent insurance policy, we note that whilst most of our recommendations were adopted, there is still an element of self-insurance exposure within the COM plan. This is because for some members the externally insured amounts are less than the excess of the relevant death/disability benefits above the resignation benefits.

1.5 Except where otherwise noted above, these recommendations have been implemented.

Assumptions for this actuarial investigation

1.6 The financial assumptions used in this actuarial investigation are summarised below:

a	Net investment return:	5.5% p.a. (gross: 6.25%p.a.)
b	Salary Inflation:	3.5% p.a.
c	Price Inflation:	2.5% p.a.

1.7 We increased the administration expense assumption from 3.5% to 4.5% of active members' salaries.

Results of this actuarial investigation

Funding Status Measure

1.8 This actuarial investigation has shown that the COM plan's financial position has improved following the last review as at 30 June 2014, and remains satisfactory.

30 June 2017 Funding Indices	
	%
Vested Benefit Index	123.5[1]
Discounted Accrued Benefit Index	131.1[2]
Minimum Requisite Benefit Index	169.1[3]

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

1.9 The improvement in asset coverage of the present value of past benefits is primarily due to financial experience (excess of investment return above salary increase) being higher than assumed, and also the contributions being made expected to be more than required.

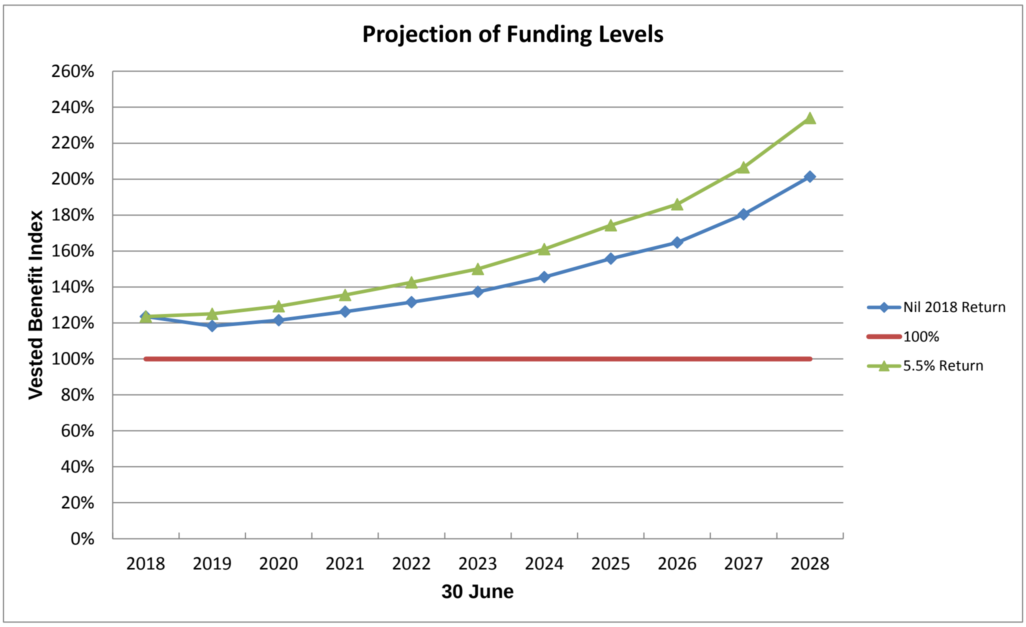
1.10 The COM plan's assets cover vested benefits at the review date and therefore the COM plan was in a satisfactory financial position at that date as defined in SPS 160.

1.11 Our projection below shows that, on the basis of the assumptions made in this actuarial investigation and assuming that City of Melbourne makes contributions in line with the recommendations set out below, the COM plan is expected to remain in a satisfactory financial position.

1.12 If experience is as expected, City of Melbourne is not expected to be required to make any further contributions because of the actuarial surplus that exists. However, we have been advised that the current preference is to use surplus to reduce investment risk over time to manage the potential for additional lump sum contributions to be required from City of Melbourne in the event that actual experience is worse than expected. Hence, we have recommended that current contribution rates be retained and that the Trustee continue to consider whether further de-risking of the investment strategy is appropriate. However, an alternative would be for City of Melbourne to commence a contribution holiday.

1.13 Reducing the investment risk in the COM plan assets has minimal immediate impact on the Vested Benefits and a reduction in the investment risk could be made immediately if the Trustee considered it appropriate. For example, if the investment strategy was set to target a net investment return of 1.5% p.a. the current contribution rates would be expected to be sufficient. If de-risking does not occur then the expectation is that the surplus will continue to increase leaving material excess assets when the last member is paid.

1.14 The future funding position, and the potential for additional contributions to be required from City of Melbourne, is dependent upon future experience and particularly future investment returns. The following chart compares the expected Vested Benefit Index (VBI) in the best estimate "base case" and if there is a nil return in the year to 30 June 2018 (and expected returns thereafter). It should be noted that a nil return is not the worst outcome that could occur.



1.15 If the 2018 investment return is zero before reverting to 5.5% p.a., no top-up contributions would be expected to be required. The expected increase in VBI shown on the chart confirms that the surplus is expected to continue to increase if contributions are not reduced or risk is reduced in the investment strategy.

1.16 We have been advised that City of Melbourne is currently negotiating their Enterprise Bargaining Agreement and therefore salaries may be retrospectively adjusted. We have not made any such adjustments to our calculations for the COM plan. We do not expect our contribution recommendations to be materially impacted by salary updates given the strong VBI position. If unexpected significant salary increases reduce the VBI to below the Shortfall limit then contribution rates need to be reviewed.

Recommendations

1.17 We recommend that City of Melbourne continues to adopt the following funding plan:

a A contribution rate of 13% (inclusive of 1% salary continuance cover) of salaries for Division D members.

b If the VBI is below 100% and in any event upon retrenchment, top-up amounts for exiting members equal to the following amount increased for contribution tax:

Benefit Payment less (Vested Benefit x VBI)

Top-up payments are to be calculated and invoiced quarterly in arrears. Top-up payments are required for all retrenchments (VBI capped at 100%), but for other exits only when the VBI is below 100%. Benefit payments exclude the amount of any insurance proceeds.

c City of Melbourne also needs to contribute the amount of members' salary sacrifice contributions.

1.18 We suggest that Vision Super finalises members' superannuation salaries with City of Melbourne and keeps them as updated as practical.

1.19 Under the current assumptions these contributions are expected to be more than required to meet funding requirements, and following discussions with Vision Super , we recommend that it considers whether a lower risk investment strategy is appropriate at this time. If a lower risk investment strategy is not adopted a large surplus would be expected to remain after the last member is paid based on the contribution recommendation above. Alternatively, it would be reasonable for City of Melbourne to have a contribution holiday and maintain the current investment strategy.

1.20 We also recommend that the Board consider a plan to reduce the exposure to illiquid assets in the COM plan to zero over time given the maturity of the plan and the possibility of large benefit payments.

1.21 We also recommend that Vision Super reviews the insurance policy to ensure it is satisfied that any self-insurance is not material or to update the policies if appropriate.

1.22 As required under SPS 160, the Trustee has set the Shortfall Limit for the COM plan at 98%. Given the current investment strategy, we consider that this Shortfall Limit is appropriate for the COM plan.

1.23 The next triennial actuarial review should be carried out as at a date no later than 30 June 2020.

Matthew Burgess

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RSE Actuary

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1 November 2017

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Section 2: Introduction

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

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

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

2.4 In accordance with Superannuation Prudential Standard 160 (SPS 160), “triennial” actuarial investigations are required at intervals of not more than three years. The last triennial actuarial investigation was completed for the COM plan as at 30 June 2014 and our report was dated 10 December 2014.

2.5 This actuarial investigation report covers the COM plan within the Fund, which is a sub-fund as defined in SPS 160. The divisions of the Fund that pay only accumulation benefits are not considered in this report. The actuarial investigations for the Parks Plan and the main Defined Benefit plan, which are also sub-funds as defined in SPS 160, are covered in separate reports.

2.6 The purpose of this report is to:

- examine the sufficiency of the assets in relation to members’ accrued benefit entitlements;
- determine the contribution rates required to so that the COM plan is expected to maintain a satisfactory financial position;
- satisfy requirements of the Trust Deed; and
- meet legislative requirements.

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

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

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

Actuarial Investigation as at 30 June 2014 and subsequent events

2.8 The report on the actuarial investigation as at 30 June 2014 concluded that the experience of the COM plan over the three years to 30 June 2014 had been favourable. During the three years to 30 June 2014 additional employer contributions were made and investment returns were higher than expected. The COM plan was in a satisfactory financial position.

2.9 We understand that City of Melbourne has contributed in accordance with our recommendations (refer Section 7)

2.10 Under the assumptions adopted in the last actuarial investigation the employer contributions were expected to be more than required to meet funding requirements, and following discussions with City of Melbourne and Vision Super, we recommended that Vision Super consider whether a lower risk investment strategy was appropriate. Subsequent to the actuarial investigation a lower risk investment strategy was adopted (refer Section 4).

2.11 We also recommended that the Board consider a plan to reduce the exposure to illiquid assets in the COM plan to zero over time given the maturity of the plan and the possibility of large benefit payments. It is very important that other assets within the Fund continue to act as liquidity provider for the COM plan. The illiquid assets have not reduced materially over the three years to 30 June 2017 and this remains a recommendation of this actuarial investigation.

2.12 We also recommended that Vision Super review the insurance policies, and update where necessary, to ensure it is satisfied that any self-insurance is not material. These recommendations were partially implemented, however there is still an element of self-insurance within the COM plan. Please refer to Section 8.

2.13 There have been no amendments to the COM plan benefits since 30 June 2014.

2.14 There have been no legislative changes or changes to benefits that have materially impacted on the funding of the COM plan. Legislative changes announced in the 2016 Federal Budget are now law but are not expected to materially impact the funding of the COM plan.

2.15 Experience has been favourable since 30 June 2014 as shown by improved funding indices (refer to Section 6).

Reliance Statement and Data

2.14 This report is provided subject to our agreed Terms and Conditions of Engagement. This report is provided solely for the Trustee's use and for the specific purposes indicated above. It may not be suitable for use in any other context or for any other purpose. We are not permitted to provide you with legal or tax advice. Therefore the information in this report does not constitute legal or tax advice. If you are unsure of your rights and responsibilities in this regard, you should consider obtaining advice from appropriately qualified professionals.

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

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

2.17 In conducting this review, we have relied upon information and data provided to us orally and in writing by the Trustee and other persons or organisations designated by the Trustee. We have relied on all the data and information provided, including plan provisions, membership data and asset information, as being complete and accurate. We have not independently verified the accuracy or completeness of the data or information provided, but we have performed limited checks for consistency. As set out in Section 3.5, we are aware that City of Melbourne is currently negotiating their Enterprise Bargaining Agreement and salaries may be retrospectively adjusted but we are not aware of any other material deficiency in the data.

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

Content of this Report

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

- Sections 3 to 5 consider the data, assets, assumptions and methodology;
- Section 6 considers the financial position of the COM plan at 30 June 2017.
- Section 7 considers the adequacy of funding of the COM plan.
- Section 8 considers insurance.
- Section 9 considers material risks.
- Appendices A to F include supporting details of benefits, membership, accounts, actuarial assumptions, assets and actuarial surplus;
- Appendix G contains the statements required under SPS 160.

Section 3: Data and Experience

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

Membership

3.2 For the purposes of this investigation, we were supplied with information on active members of the COM plan as at 30 June 2017 together with details of exits during the period from 1 July 2014 to 30 June 2017. While we have relied upon the data provided, from our checking processes we believe that the data is sufficiently accurate for the purposes of this investigation.

3.3 In summary, the active membership of the COM plan has decreased by 42 (or 29%) from 146 at 30 June 2014 to 104 at 30 June 2017.

Summary of COM Plan Membership as at 30 June 2017

	Number	Average Age (years)	Average Service (years)	Average Salaries
Active	104	56.0	29.9	95,105

3.4 Retained members have accumulation benefits within the Fund but a defined benefit top-up may apply and any such amount must be paid from COM plan assets. As at 30 June 2017, there were 38 retained members with account balances totalling $7.7 million. A summary of the movement in active membership is set out in Appendix B.

Salaries

3.5 We have been advised that City of Melbourne is currently negotiating their Enterprise Bargaining Agreement and therefore salaries may be retrospectively adjusted. We have not made any allowance for any such adjustments prior to 30 June 2017. This could mean that the funding indices as at 30 June 2017 (refer Section 6) are overstated but it is unlikely to have a material impact on the long term contribution recommendations.

3.6 We have examined the salary experience of COM plan members over the three year period ending 30 June 2017. The data showed that the full time equivalent salary of COM plan members who remained members as at 30 June 2017 grew by 1.7% p.a. over the period. This compares to growth of 3.9% p.a. over the three year period to 30 June 2014 in the last actuarial investigation.

3.7 The actual increase over the three years ending 30 June 2017 was lower than the assumed rates of 4.25% p.a. in the 30 June 2014 actuarial investigation. While noting our comments in Section 3.5 that further salary increases may be retrospectively applied, the lower than expected salary increases would have resulted in an improvement in the COM plan financial position.

3.8 It is of interest to compare the average rate of salary increase with the increase in Australian Average Weekly Ordinary Time Earnings (AWOTE). Over the three years period ending 30 June 2017, AWOTE increased by 2.0% p.a. Once again noting our comments in Section 3.5 that further salary increases may be retrospectively applied, on average, members received salary increases which are slightly lower than those of the wider community.

Demographic Experience of Active Members

3.9 Given the small size in membership, it is difficult to develop statistically reliable decrement assumptions based on plan experience.

3.10 We have decided to continue to apply the same resignation and retirement rates as are used for the main Defined Benefit plan. These are the same rates that were adopted in the last triennial actuarial investigation as at 30 June 2014.

3.11 For death and disablement we have decided to retain the same assumptions adopted for the 30 June 2014 actuarial investigation that were based on the external insurance premium rates.

Administration Expenses

3.12 In the 30 June 2014 investigation, the administration expense was assumed to be set as 3.5% of salaries for active members.

3.13 Actual expenses over the three years ending 30 June 2017 have been higher than expected. Based on experience we have increased the assumed level of expenses to 4.5% of salaries for active members.

Investment Returns

3.14 Vision Super has advised that the rate of return (net of tax and investment expenses) earned by the COM plan for the three years ending 30 June 2017 was 7.0% p.a..

Investment Return	
Year ended	**% p.a.**
30 June 2015	9.0
30 June 2016	5.1
30 June 2017	7.1
Average	7.0

3.15 Comparison of the 7.0% p.a. return for the intervaluation period with the average salary increase rate (from paragraph 3.6) of 1.7% p.a. shows a real return of approximately 5.3% p.a. which is higher than the 3.25% p.a. real return assumed in the 2014 investigation.

3.16 The real returns over the valuation period have had a positive effect on the COM plan's financial position. Once again, noting that this analysis does not consider any retrospective salary increases that may be applied (from paragraph 3.5).

Section 4: Assets and Investments

Assets

4.1 Copies of the Fund's audited financial statements as at 30 June 2017 were supplied by Vision Super for the investigation together with details of the investment strategy at 30 June 2017. We were also provided a breakdown of the audited market value of assets by sub-plan. A summary of cash flows over the period 1 July 2014 to 30 June 2017 is set out in Appendix C.

4.2 The fair value of the COM assets as at 30 June 2017 used in the valuation was $56.7 million. This asset value excludes $7.7 in respect of retained benefits accounts. The audited financial statements include the fair value of assets for the three defined benefit sub-plans and this value is consistent with that amount.

4.3 Vision Super has excluded the Operational Risk Financial Requirement from the COM plan assets in the financial statements.

4.4 We believe that the most suitable approach for this investigation is to adopt the fair value of assets for all purposes. Previously a net market value has been used, which allows for disposal costs that are not deducted from fair value. In our opinion the use of fair market value is reasonable as the COM plan is expected to be ongoing. The funding position of the COM plan may be variable because of the current high volatility in asset valuations.

Asset Allocation

4.5 The COM plan invests in a wide range of asset classes such as equity, property and fixed interest investments. Appendix E shows the Strategic Asset Allocation and the Actual Asset Allocation as at 30 June 2017.

4.6 The Strategic Allocation to Growth Assets as at 30 June 2017 was 41.9% (which is a reduction from 68.6% as at 30 June 2014), while the actual growth allocation was higher at 46.2%. The Trustee also uses derivative strategies to reduce equity tail risk.

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

4.8 Setting the Strategic Asset Allocation is a balance between:

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

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

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

Liquidity

4.10 As at 30 June 2017, 28.3% of the investments are in illiquid asset classes.

4.11 We understand that it is intended that the illiquid asset allocation will reduce to the Strategic Target allocation of 24.1% (which was increased from 21.1% subsequent to 30 June 2017). We note that while some of the illiquid assets are in fixed ended funds which will become liquid over time, others such as the Direct Property and Infrastructure investments will need to be sold or transferred from the defined benefit assets in the future.

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

4.13 Vision Super has advised that illiquid assets held by the COM plan are able to be transferred to other defined benefit or accumulation members within the Fund. Given the small relative size of the COM plan this should enable adverse liquidity experience to be managed.

Unit Pricing

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

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

Shortfall Limit

4.16 The Trustee has set a Shortfall Limit in accordance with SPS 160 of 98% for the COM plan. It was revised from 97% following a reduction in the allocation to growth assets in 2015. This means that between actuarial investigations, a restoration plan to restore the VBI to 100% is required if the COM plan's VBI reduces to below 98%.

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

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

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

a The actual asset allocation retains an allocation to growth assets of about 46%;

b Vested benefits are higher than Minimum Requisite Benefits; and

c The employer has a contractual obligation to pay contributions determined by the Trustee.

Section 5: Valuation Assumptions and Funding Method

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

Valuation of Benefit Liabilities

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

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

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

5.5 Appendix D contains a summary of the assumptions used.

Key Financial Assumptions

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

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

5.8 The "best estimate" financial assumptions adopted at the 30 June 2014 actuarial investigation were:

- 4.25% p.a. salary inflation.
- 7.5% p.a. investment return.

Investment Return

5.9 In order to determine the best estimate assumptions for this investigation, we have considered the capital market assumptions of Willis Towers Watson and the Fund's asset consultants, Frontier. A net investment return of 5.5% p.a. has been adopted for this investigation. The reduction since 2014 reflects both the reduction in growth assets in the asset allocation and lower asset class return expectations.

5.10 The assumptions are net of investment management fees.

CPI Increases

5.11 The Reserve Bank's target CPI range is 2.0% p.a. to 3.0% p.a.. We have reduced the assumption from 2.75% p.a. at 30 June 2014 to 2.5% p.a. at 30 June 2017 after considering the price inflation expectations of the asset consultants and the need to be consistent with the assumed investment return.

Salary Inflation

5.12 The actual salary increases of the COM plan members have been lower than AWOTE (refer 3.8) bearing in mind that retrospective salary increases may still be applied (refer 3.5). As the average age of COM plan members is now over 55 years, significant benefit payments are expected in the next few years and the short term salary inflation assumption is important. A salary inflation assumption of 3.5% p.a. has been adopted in this investigation and is considered best estimate.

5.13 A salary increase assumption of 3.5% p.a. is 1.0% p.a. above the assumed 2.5% p.a. CPI, which is within the historical long term 0% to 2% p.a. differential. Given recent experience and the maturity of the COM plan, we believe that this is appropriate. No promotional salary increases are being assumed.

5.14 Therefore, the "best estimate" financial assumptions adopted for the 30 June 2017 investigation are a 2.0% real investment return over salary inflation.

This comprised a 5.5% p.a. net of tax investment return assumption and a 3.5% p.a. salary inflation assumption. This is 1.25% p.a. lower than assumed as at 30 June 2014 and will mean a relative deterioration in the expected long term funding position.

Demographic Assumptions

5.15 The demographic assumptions that affect the COM plan have been discussed in Section 3. Appendix D summarises the demographic assumptions adopted for this investigation.

Benefits

5.16 The benefits which have been valued are summarised in Appendix A.

Valuation of Assets

5.17 In the previous investigation we adopted the approach of market value of assets for all purposes, while in this investigation we are using fair market value because of changes to accounting and actuarial standards. In Sections 4, 6 and 9 we note that the funding position of the COM plan in the short term may be variable because of the current high volatility in asset valuations.

Actuarial Funding Method

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

5.19 Briefly the projection operates in the following manner:

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

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

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

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

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

5.21 Under SPS 160, APRA requires superannuation funds to put in place a plan that is expected to fully fund their vested benefits within three years if the fund's assets are less than the vested benefits at an actuarial investigation, also known as being in an "Unsatisfactory Financial Position". A funding plan is also required when the VBI reduces to below the shortfall limit, currently 98%, between actuarial investigations.

5.22 The shortfall or surplus relative to vested benefits is likely to vary from the actuarial shortfall or surplus calculated using the method set out in 5.20. It is possible that the recommended funding amount under this funding method may not be sufficient to be expected to maintain the COM plan's Vested Benefits Index (VBI) to 100% within the timeframe required by APRA if it is below 100%. In this situation additional contributions would be recommended as required by APRA.

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

5.24 In the next section we review the financial position as at 30 June 2017 and in Section 7 we discuss the adequacy of the long term funding arrangements.

Section 6: Financial Position of the COM Plan

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

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

Vested Benefits Index

6.3 The first of the indices is the "Vested Benefits Index" (VBI). Vested Benefits are defined as the benefits that would be due and payable if all the members voluntarily terminated their service with their employers at the investigation date. For active members, the Vested Benefits are the resignation benefit or the early retirement benefit (if aged 55 or more). For retained members, the vested benefit included in this index is the defined benefit top-up amount (i.e. the excess of the Accrued Retirement at the date of exit adjusted with CPI indexation over their account balance) which is also the amount included for these members in the other indices.

6.4 The Vested Benefits Index is calculated as follows:

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

6.5 The Vested Benefit Index as at 30 June 2017 is:

VBI as at 30 June 2017	
COM plan assets ($m)	56.7
Vested Benefits ($m)	45.9
Vested Benefit Index	123.5%

6.6 The calculated VBI for the COM plan at 30 June 2017 is 123.5%. This compares with a VBI of 112% at the 30 June 2014 investigation. The COM plan was not in an unsatisfactory financial position as at 30 June 2017.

6.7 The VBI for the COM plan has increased since 30 June 2014 mainly due to the higher than expected real investment returns during the year and also the contributions being made expected to be more than required.

Discounted Accrued Benefits Index

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

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

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

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

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

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

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

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

6.12 The Discounted Accrued Benefit Index as at 30 June 2017 is:

DABI as at 30 June 2017	
COM plan assets ($m)	56.7
Discounted Accrued Benefits ($m)	43.2
Discounted Accrued Benefit Index	131.1%

6.13 The calculated DABI for the COM plan at 30 June 2017, based on the "best estimate" assumptions, used in this investigation, is 131.1%. The DABI was estimated to be 125% at the 30 June 2014 investigation. The increase in DABI was mainly due to the better than expected real investment return over the period offsetting the impact of the changes in financial assumptions. Also the contributions being made were more than expected to be required.

6.14 Because the DABI is more than 100%, it means current assets are expected to be sufficient to provide the benefits of members' accrued benefits based on service to 30 June 2017.

Minimum Requisite Benefits Index

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

6.16 The Minimum Requisite Benefits (MRBs) are the minimum amount of benefit that must be provided to enable City of Melbourne to satisfy its Superannuation Guarantee obligations. The method to calculate the amount of MRBs for the active members is specified in my Benefit Certificate dated 17 June 2015.

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

6.18 The Minimum Requisite Benefit Index is calculated as follows:

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

6.19 The Minimum Requisite Benefit Index as at 30 June 2017 is:

MRBI as at 30 June 2017	
COM plan assets ($m)	56.7
Minimum Requisite Benefits ($m)	33.5
Minimum Requisite Benefit Index	169.1%

6.20 As at 30 June 2017 we estimate that the ratio of the market value of assets to the amount of Minimum Requisite Benefits was approximately 169.1%. This compares with a MRBI of 154% at the 30 June 2014 investigation. The increase in MRBI was mainly due to the better than expected investment return during the period and the contributions being higher than expected to be required.

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

Other Measures of Financial Position

6.22 In accordance with Clause A.21.1(a) of the Trust Deed, an Employer requires the approval of the Board to terminate its contributions to the COM plan. We assume this approval would not be provided unless any future funding risk is adequately managed.

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

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

6.24 Further it states in Clause A.21.5 that:

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

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

6.26 On retrenchment, members' are entitled to an accrued retirement lump sum. This benefit may also be payable on partial disablement. For active members, the ratio of retrenchments benefits as at 30 June 2017 to assets was 120.1%. At the 30 June 2014 investigation, the retrenchment benefit index was 108%. The increase in the index is mainly due to better than expected investment return during the period and the contributions being higher than expected to be required.

6.27 An additional contribution is required from City of Melbourne in respect of each retrenchment, and each exit if the VBI is below 100%, so that there is no additional financial strain on the COM plan.

6.28 In certain situations, some members can elect a pension, subject to the approval of Vision Super. While there are no current pensioners, a member electing a pension may cause a strain on funding.

6.29 In Appendix E the COM plan's asset allocation is shown and there is currently a 28.3% allocation to illiquid assets. The funding indices have been calculated based on the valuation of these assets at fair market value from the 30 June 2017 audited financial statements (excluding disposal costs). In the unlikely event that these assets had to be quickly liquidated it is possible that this could occur at discounted values resulting in lower funding ratios. For example, a 20% discount on forced sale of illiquid assets would reduce the funding indices by approximately 7%.

6.30 There was no material deferred tax asset in the Fund as at 30 June 2017. Therefore, the funding is not significantly dependent upon being able to utilize such an amount.

Section 7: Assessing the adequacy of the Funding Arrangements

The Present Funding Arrangements

7.1 The funding arrangements for the COM plan currently comprise the following components:

a A contribution rate of 13% (inclusive of 1% salary continuance cover) of salaries for Division D members;

b If the VBI is below 100% and in any event upon retrenchment, top-up amounts for exiting members equal to the following amount increased for contribution tax:

Benefit Payment less (Vested Benefit x VBI)

Top-up payments were to be calculated and invoiced quarterly in arrears. Top-up payments are required for all retrenchments (VBI capped at 100%), but for other exits only when the VBI is below 100%. Benefit payments exclude the amount of any insurance proceeds.

c City of Melbourne also needs to contribute the amount of members' salary sacrifice contributions.

Total Service Liability Surplus/ Deficit as at 30 June 2017

7.2 As at 30 June 2017 there was a total service liability surplus of $12.2 million. This means that the current value of assets plus expected future contributions is more than the value of expected future benefits and expenses by $12.2 million, assuming that City of Melbourne continues to contribute at current rates. Full details of these calculations are set out in Appendix F.

7.3 The total service liability surplus as at 30 June 2014 was $11.4 million. The actuarial surplus has increased over the intervaluation period mainly due to financial experience (excess of investment return above salary increase) being significantly higher than assumed, but partially offset by a change in assumptions. The City of Melbourne contributions have also been higher than is expected to be required.

7.4 The existing funding arrangements are expected to be adequate if the current assumptions are borne out in practice. In fact, the total service liability surplus of $12.2 million is higher than the expected value of all future City of Melbourne contributions (less tax) of $5.7 million (refer to Appendix F). This means that if experience is as expected from 30 June 2017, City of Melbourne would not need to make any further contributions to the COM plan. The long term City of Melbourne contribution rate implied by the aggregate funding method would be zero.

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

7.6 If experience is as expected in future, to avoid being left with a surplus in the long term, the Trustee will need to either materially:

a reduce City of Melbourne contributions (potentially to zero); or

b reduce the expected investment return by reducing investment risk. Eventually this step would be expected to be required even if City of Melbourne ceased to contribute.

Sensitivity of Funding Arrangements to Future Assumptions

7.7 As outlined in Section 5, factors that affect the future experience of the COM plan are split into two broad categories. They are the financial assumptions and the demographic assumptions. The results are more sensitive to changes in the financial assumptions and the sensitivity of the "actuarial surplus" to the financial assumptions is considered below.

7.8 To quantify the potential impact of variations in financial experience the following table shows the impact of changing some of the assumptions on the "actuarial surplus" as at 30 June 2017.The "gap" is the excess of the assumed investment return above the assumed salary inflation, because it is the difference between the assumptions that is important as they offset each other.

Impact of Changes in Key Assumptions	
	Actuarial Surplus $ Million
Best estimate assumptions	12.2
Higher gap (+1% pa)	14.4
Lower gap (-1% pa)	9.8
Lower gap (-4% pa)	0.8

7.9 The table shows that a variation in the financial assumptions has a significant impact on the actuarial surplus or shortfall.

Note that the variations selected in the sensitivity analysis do not indicate upper or lower bounds of all possible outcomes.

7.10 There is also a risk that the demographic experience may differ from our assumption which would lead to a lower or higher funding cost.

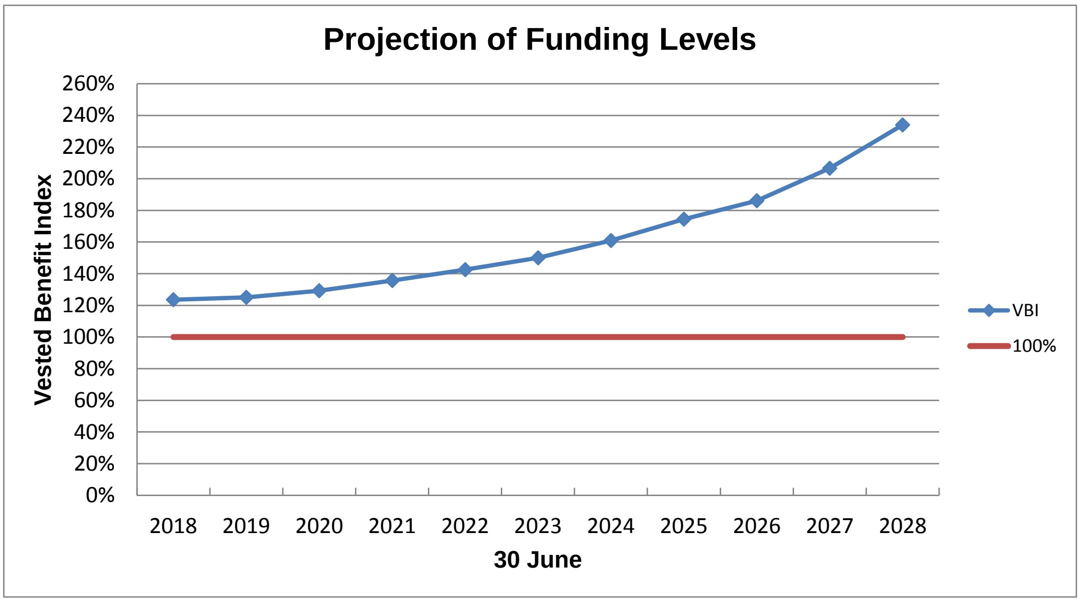
7.11 This table also shows that with the $12.2 million total service liability surplus as at 30 June 2017, a net of tax investment return of 4.5% p.a. rather than 5.5% p.a. was expected to be more than sufficient to fund all liabilities. Even if the investment strategy was changed so that the expected investment return was 1.5% p.a. rather than 5.5% p.a. there remains an actuarial surplus of $0.8 million. This means that in the long term there may be opportunity to further de-risk the investment strategy materially and target a lower expected investment return. This assumes City of Melbourne continues to contribute at current rates.

7.12 If the investment strategy was changed so that the expected net return reduced to 4.5% p.a. or to 1.5% p.a., the VBI as at 30 June 2017 would not have changed materially because currently all of the Vested Benefits are lump sums and independent of assumptions.

Projection of Funding Levels

7.13 This section considers the adequacy of the funding by projecting the COM plan's future funding level. This projection is based on the "best estimate" funding assumptions set out in Appendix D.

7.14 The graph below shows the projected Vested Benefits (VBI) of the COM plan for the next ten years.



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

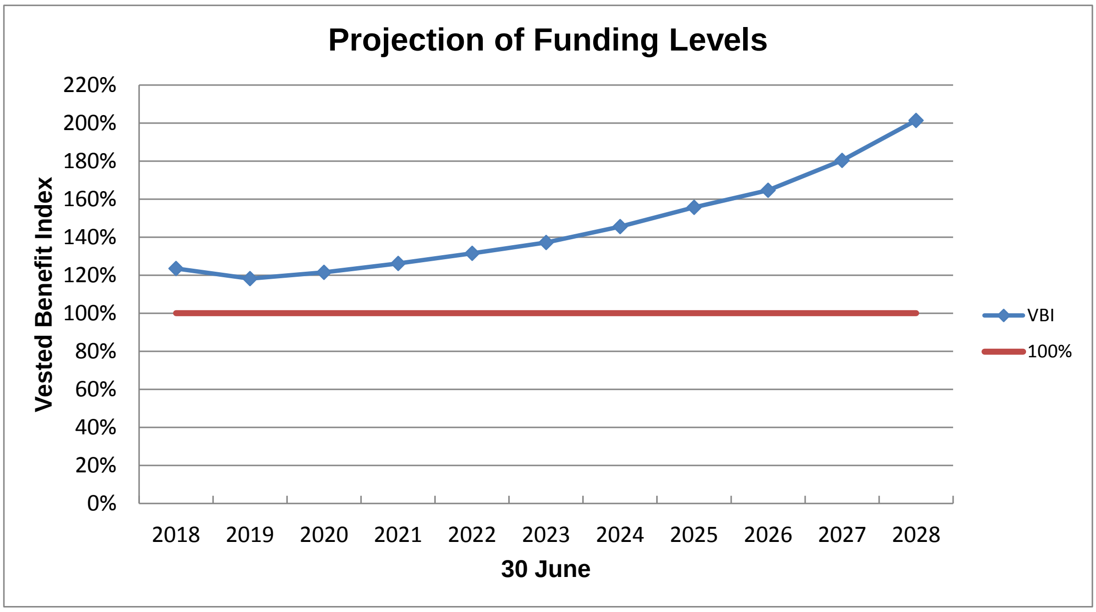
7.16 The above chart shows that the VBI is expected to increase over time. This is consistent with the total service liability surplus of $12.2 million at 30 June 2017.

7.17 If the future investment return was 4.5% p.a. the VBI would still be expected to increase, but much more slowly. If the future investment return was 1.5% p.a. the projected VBI would be expected to decrease slowly towards 100% over the next ten years.

Other Funding Issues

7.18 The COM plan is mature and its funding is very sensitive to future experience. As shown in Section 7.8 a lower than expected investment return would reduce the “actuarial surplus”.

7.19 The chart below shows the impact on the VBI in an adverse scenario where the return is 0% for the year to 30 June 2018 and all other experience is as expected. A best estimate return of 5.5% p.a. is assumed from 1 July 2018.



7.20 If the return is 0% in 2017/18, the VBI is expected to fall slightly, before increasing over time. As described in Section 3, if the 30 June 2017 salaries are understated, the VBI may fall more than illustrated in the above graph depending on the size of any retrospective increases.

7.21 On the other hand, if experience is favourable an even larger “actuarial surplus” could result. Vision Super would need to consider how to treat such an “actuarial surplus”. Vision Super may also wish to consider adopting a more defensive investment strategy in order to reduce the investment risk.

Events since 30 June 2017

7.22 Vision Super has advised that the investment return for the three months ending 30 September 2017 for the COM plan was 1.05% (equivalent to 4.3% p.a.). This is lower than the expected return of 5.5% p.a. and therefore will have had a slightly negative impact on the financial position. We note that the VBI of the COM plan will have remained well above 100% and the October 2017 return is likely to have been above expectations. This does not impact our recommendations.

7.23 We are not aware of any other events subsequent to 30 June 2017 that would materially impact upon the results of the actuarial investigation of the COM plan.

Recommendation

7.24 Section A.20.1 of the Trust Deed states:

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

7.25 The analysis conducted has concluded that if experience is as expected the Trustee will need to either:

a Reduce City of Melbourne's contributions, potentially to zero; or

b Reduce investment risk to target a lower expected investment return.

7.26 A reduction in investment risk would eventually be expected to be required even if City of Melbourne contributions are reduced because of the size of the current surplus.

7.27 With the current VBI of 123.5% not being impacted immediately by changes in investment strategy, a reduction in investment risk could be done in the short term. Alternatively, a contribution holiday would be reasonable, however based on our discussions with Vision Super, we understand the preference is to retain current contribution rates and reduce investment risk. Assuming this remains the case, we recommend that Vision Super reviews the City of Melbourne's asset allocation to determine if reducing investment risk further is appropriate. Targeting a 1.5% p.a. investment return is expected to be sufficient.

7.28 If the investment risk of the COM plan is not materially reduced, and City of Melbourne continues to contribute at the rates recommended below, the already material surplus is expected to continue to grow and Vision Super may have difficulty utilising the surplus.

7.29 In summary, we recommend that City of Melbourne continues to adopt the following funding plan:

a A contribution rate of 13% (inclusive of 1% salary continuance cover) of salaries for Division D members;

b If the VBI is below 100% and in any event upon retrenchment, top-up amounts for exiting members equal to the following amount increased for contribution tax:

Benefit Payment less (Vested Benefit x VBI)

Top-up payments are to be calculated and invoiced quarterly in arrears. Top-up payments were required for all retrenchments (VBI capped at 100%), but for other exits only when the VBI is below 100%. Benefit payments exclude the amount of any insurance proceeds.

c City of Melbourne also needs to contribute the amount of members' salary sacrifice contributions.

7.30 It is very important to understand that each of the components of the funding arrangements is very dependent on the actual future experience of the COM plan. Consequently all contribution components are subject to regular review by the Trustee using actuarial advice and could vary from the current recommendations at any time in the future. The next actuarial investigation is due as at 30 June 2020.

Section 8: Insurance

8.1 The COM plan provides death and disablement benefits that are significantly higher than the resignation/retirement benefits.

8.2 As at the 31 December 2011 valuation, the COM plan was self-insured. Therefore, at that time it was City of Melbourne that ultimately bore the financial risk if the amount of death and disablement benefits paid was significantly higher than expected. Variation in the claims experience could also have a large impact on the COM plan's funding position and increase the likelihood of more variable contributions.

8.3 We recommended in the triennial actuarial investigation as at 31 December 2011 that the Trustee externally insure the death and disablement benefits in the COM plan in order to mitigate the various risks involved. The COM plan has been externally insured by CommInsure since 1 October 2012.

8.4 Given the small number of COM plan members and the progression of time, the risk of a self-insured claim emerging from prior to 1 October 2012 is small. If this were to occur, City of Melbourne would currently be required to make top-up contributions in respect of the self-insured component of the benefit if the VBI was below 100%, on the basis that it makes top-up contributions for the unfunded element of all benefits on exit in this circumstance. Therefore, if the VBI was below 100% there would not be expected to be a financial strain on the funding if such a claim was made. If the VBI is above 100% then the self-insured component of the benefit is likely to be able to be funded from surplus.

8.5 Vision Super has externally insured lump sum amounts in some situations where pensions could be paid if a claim occurs. Actuarial advice has been provided on the appropriate amount of the lump sums. If such a claim occurs, City of Melbourne would retain the ongoing risk in respect of the pension.

8.6 When completing the 30 June 2014 actuarial investigation, we broadly reviewed the terms of the cover and the formulae used to determine the sums insured. We identified some situations where the full future service component of death and disability benefits was not covered by the policy and situations where there may be some self-insurance. While in most cases the differences were not material for funding, we recommended that Vision Super review the insurance policies, and update them where necessary, to ensure that it is satisfied that any self-insurance is not material. We provided Vision Super with a list of possible issues that we identified.

8.7 Subsequently to 30 June 2014, the insurance policy was updated to better reflect the underlying sum insured components. Upon reviewing the terms of cover and formulas used to determine the sums insured, we note there are still some situations where death and disability benefits are not covered by the policy and as such, there is an element of self-insurance. While in most cases the differences are not material for funding, we recommend that Vision Super review the insurance policies and update, where necessary to ensure that any self-insurance is acceptable to Vision Super.

Section 9: Material Risks

9.1 The funding of the COM plan is dependent upon future experience. We have briefly considered below the material risks in respect of funding. If experience is materially adverse City of Melbourne may be required to make additional contributions.

Investment Risk

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

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

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

Salary Inflation Risk

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

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

Pensioner Longevity Risk

9.7 At 30 June 2017 there were no life time pensioners in the COM plan, but some members can elect pensions in prescribed circumstances. If this should occur, there is a risk that the liability will increase, particularly if pensioners live longer than expected. This would have a negative impact on the funding position.

Retrenchments Risk

9.8 The retrenchment benefit is larger than the resignation benefit for some members. A significant number of retrenchments would have a negative impact on liquidity and funding.

9.9 The current funding plan includes top-up contributions by City of Melbourne to manage this risk, although there could be a timing issue with additional contributions to fund the retrenchment benefits only being made after the retrenchments.

9.10 Furthermore, a large number of exits would temporarily reduce the funding position, when the VBI is below 100%, until the additional contributions to fund the deficiency with respect to the exits are made.

Legislation Risk

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

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

b Changes to tax may impact funding.

Other

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

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

Appendix A: Summary of Benefits and Conditions

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

Membership

The City of Melbourne Plan was established in 1995 following the transfer of the City of Melbourne Superannuation Fund into Vision Super. The benefits are set out in the City of Melbourne Fund Trust Deed, and now incorporated in the Fund's Trust Deed in Division D. This plan is closed to new members.

Contributions and Accrual Rate

Members are allowed to contribute at a rate between 0% and 9% of salary. The accrual of member's benefit multiple is dependent on member contribution rate, as follows:

Contribution Rate (%)	Accrual Rate Post 30 June 1993 (%)	Accrual Rate Pre 30 June 1993 (%)
0	7.7	9.00
1	9.50	11.00
2	11.25	13.00
3	13.00	15.00
4	14.75	17.00
5	16.50	19.00
6	18.25	21.00
7	20.00	23.00
8	21.75	25.00
9	23.50	27.00
6.5%*	19.00	22.00

* Ex-officer only

Accrued Benefit Multiple (ABM)

The sum of accrual rate for each year of membership in accordance with the table above.

Retirement Benefit

The accrued retirement benefit calculated as Accrued Benefit Multiple x Final Average Pay (FAP).

Death Benefit

The lump sum benefit is calculated as the sum of:

i. ABM based on pre 30 June 1993 accrual rate x FAP; and

ii. 21% x Prospective Service to age 60 x FAP

Total and Permanent Disablement Benefit

The lump sum benefit is calculated as the sum of:

i. ABM x FAP; and

ii. 21% x Prospective Service to age 60 x FAP

Retrenchment Benefit

The accrued retirement benefit.

Resignation Benefit

The lump sum benefit of either:

a. Immediate benefit equal to:

- If member resigns before reaching age 50:

  ABM_5 x FAP + C_5

- If member resigns between age 50 and 55:

$$\frac{[\ (ABM_5 \times FAP + C_5\ ) \times (55 - age) + (ABM \times FAP) \times (Age - 50)\ ]}{5}$$

Where

ABM5 – Accrued Benefit Multiple five years ago

C5 – contributions over the last five years plus credited investment returns

b. Retained Benefit

Members can elect to retain their benefit within the fund and upon reaching age 55 members are entitled to the greater of the two benefits below:

- Resignation Benefit adjusted with investment earnings; or
- Accrued Retirement Benefit at the date of exit adjusted with CPI indexation

Salary Continuance Benefit

On temporary disablement or illness, members may receive 70% of salary payable up to two years after a 90-day waiting period.

Superannuation Guarantee

The benefits are subject to a superannuation guarantee minimum. Like all defined benefit members, the minimum is based on salary as defined in the Trust Deed. If Ordinary Time Earnings is higher than salary then top-up contributions are made to an accumulation account within the Fund and do not need to be considered from a funding perspective.

Other Benefits

Other benefit provisions exist, including the ability to request a pension in specified circumstances.

Appendix B: Membership Movements

COM plan

Membership as at 1 July 2014[1]	146
Exits	42
Membership as at 30 June 2017	104

[1] In addition there were 38 COM plan retained beneficiaries as at 30 June 2017.

Appendix C: Summary of Income and Expenditure for the Fund

	($'000)
Market Value at 1 July 2014	**6,827,063**
Plus	
Net Investment Revenue	1,610,544
Contribution Revenue	1,917,467
Other Revenue	25,816
	3,553,827
Less	
Benefits paid	1,518,462
Administration Expenses	66,102
Superannuation Contribution Surcharge	3
Insurance Premium	57,837
Taxation Provision	141,051
	1,783,455
Market Value at 30 June 2017	**8,597,435**
Comprised of:	
Defined Benefit Plan	2,330,138
City of Melbourne	56,681
Parks Victoria including Ports	34,332
Accumulation Accounts & Reserves	6,176,284

Appendix D: Summary of Valuation Assumptions

Financial Assumptions

The most significant financial assumptions are:

- Active members:
  - investment returns (net of tax; expenses) — 5.5% p.a.
  - salary inflation growth — 3.50% p.a.
  - CPI increases — 2.50% p.a.
- administration expenses: — 4.5% of salaries

Demographic Assumptions

Active Members

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

Year of Age	Deaths %	Disablements %	Resignations %	Retirements %
20	0.10	0.02	13.42	-
30	0.09	0.06	6.48	-
40	0.12	0.13	3.77	-
50	0.27	0.40	2.44	-
60	0.76	1.43	-	15.0
64	-	-	-	15.0

Appendix E: Asset Allocation

Asset Class	Actual Asset Allocation 30 June 2017 (%)	Strategic Asset Allocation (SAA) 30 June 2017 (%)
Australian Equity	8.1	7.5
International Equity	10.4	9.5
Private Equity	2.6	0.0
Infrastructure	9.1	9.0
Absolute Return Multi Strategies	10.0	10.0
Property*	9.4	9.0
Opportunistic Investments	3.7	0.0
Floating Rate Debt	12.1	12.5
Fixed Interest	25.0	32.5
Cash	9.6	10
Total	**100.0**	**100.0**
Allocation to Illiquid Assets	28.3%	21.1%#
Allocation to Growth Assets	46.2%	41.9%#

* 7.1% of actual property is illiquid.

Subsequent to 30 June 2017 the illiquid SAA was increased to 24.1% and the growth SAA was reduced to 39.9%.

Appendix F: Total Service Liability Surplus/(Deficit)

		($million)
Present Value of Active Member Liabilities		50.6
Retirement	46.0	
Death	1.5	
Disablement	1.2	
Resignation	1.9	
plus Present Value of Additional Retained Liability		0.1
less Family Offset and Surcharge Account balances		(0.9)
plus Value of Salary Continuance Cover		0.5
plus Present Value of Future Expenses		2.1
plus Allowance for tax on Contributions		0.5
Total Benefit Liability		**52.9**
Compared to:		
Assets		56.7
plus Value of ongoing member contributions		2.2
plus Value of ongoing Authority contributions (13% of salaries)		6.2
Total Assets		**65.1**
Surplus of Total Assets over Total Benefit Liability as at 30 June 2017		12.2

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

COM plan

The following statements are prepared for the purposes of actuarial statements and Paragraphs 23(a) to (h) of SPS160.

Background

The effective date of the most recent actuarial review of the COM plan is 30 June 2017. The actuarial investigation was undertaken by Matthew Burgess, Fellow of The Institute of Actuaries of Australia, on behalf of Towers Watson Australia Pty Ltd (AFSL 229921).

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

Assets (SPS160 23(a))

The fair value of the COM plan assets at 30 June 2017 was $56.7 million.

This value of assets at 30 June 2017 excludes amounts held to meet the Operational Risk Financial Requirement (ORFR) and was used to determine the required contributions.

Financial Condition SPS160 23(b)

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

Date	Vested Benefits Index (%)
30 June 2017	123%
30 June 2018	125%
30 June 2019	129%
30 June 2020	136%

The projected financial position is shown only for the defined benefit members and the additional liability for retained members.

Accrued Benefits (SPS160 23(c))

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

In determining Accrued Benefits, the major assumptions adopted were a 2.0% p.a. real investment return over salary inflation. This comprised a 5.5% p.a. net of tax investment return assumption and a 3.5% p.a. salary inflation assumption.

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

Assumptions were also made about rates members would withdraw from service because of death, total and permanent disablement and resignation.

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

Using the above method, the total value of accrued benefits and the actuarial value of the COM plan assets at 30 June 2017 were:

Value of accrued benefits:	$43.2 million
Fair Value of Assets:	$56.7 million. The ratio of the actuarial value of the assets to the value of the total accrued benefits was 131.1% which indicates an adequate coverage of the value of the accrued benefits as at the date of the actuarial investigation.

In our opinion, the value of the assets of the COM plan at 30 June 2017 was adequate to meet the liabilities of the COM plan in respect of accrued benefits in the COM plan. The assets are considered adequate in the longer term based on the contributions recommended below, and assumptions as to the future experience which we regard as appropriate.

Vested Benefits (SPS160 23(d))

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

At the date of the actuarial investigation, the total vested benefits and net market value of the COM plan total assets were:

Total Vested Benefits:	$45.9 million
Fair Value of Assets:	$56.7 million

The ratio of the net market value of the COM plan assets to total vested benefits was 123.5%, which indicates a satisfactory coverage of Vested Benefits as at the date of the actuarial investigation.

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

The Trustee has determined the short fall limit to be 98%. In my opinion this does not need to be reviewed.

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

Funding and Solvency Certificates (FSC) for the Fund covering the period from 1 July 2014 to 30 June 2017 as required by the Superannuation Industry (Supervision) Act have been provided.

In our opinion, the solvency of the Fund will be able to be certified in any Funding and Solvency Certificate required under the Superannuation Industry (Supervision) Regulations during the three year period to 30 June 2020 if experience is as assumed.

We note that for the purpose of issuing an FSC, the appropriate funding measure is in respect of coverage of minimum benefits (MRBs), which in this fund are considerably less than vested benefits, and are covered sufficiently by COM plan assets. At 30 June 2017, the ratio of assets to MRBs is 169.1%. The total Minimum Requisite Benefits as at 30 June 2017 was $33.5 million.

Recommended Contributions (SPS160 23(g))

We recommend that City of Melbourne contribute the following amounts from 1 July 2017:

- A contribution rate of 13% (inclusive of 1% salary continuance cover) of salaries for Division D members;
- Fund the top-up payments for exiting members equal to the following amount increased for contribution tax:

Benefit Payment less (Vested Benefit x VBI)

Top-up payments are to be calculated and invoiced quarterly in arrears. Top-up payments are required for all retrenchments (VBI capped at 100%), but for other exits only when the VBI is below 100%. Benefit payments exclude the amount of any insurance proceeds; plus

- Any salary sacrifice contributions should be made in respect of members in accordance with the Trust Deed.

The amounts of required contributions will be reviewed in the next triennial actuarial review of the COM plan to be conducted with an effective date no later than 30 June 2020. However, an earlier actuarial review should be undertaken if there are any significant changes in the COM plan.

Matthew Burgess

Matthew Burgess FIAA
RSE Actuary

Gabrielle Baron FIAA

1 November 2017