

The YMCA Pension and Assurance Plan

Report on the Actuarial Valuation as
at 1 May 2014



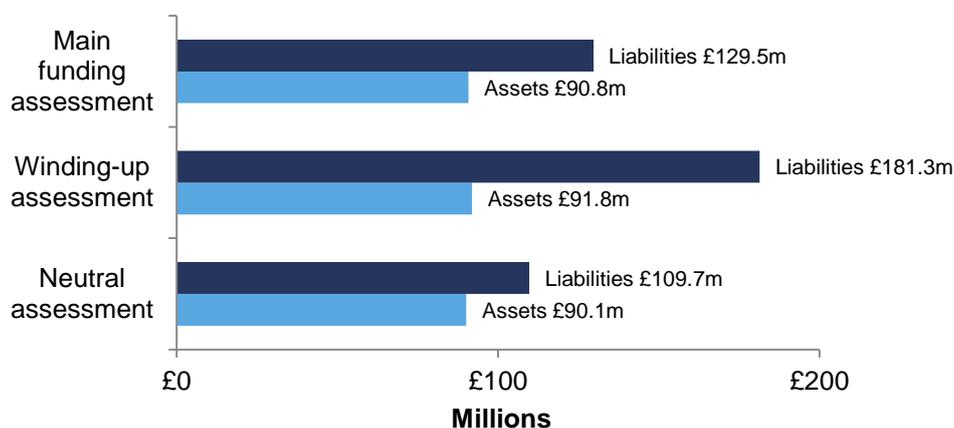
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Executive Summary

The Trustee of The YMCA Pension and Assurance Plan has recently completed a valuation of the Plan as at 1 May 2014. This report sets out the approach adopted by the Trustee, the results obtained and the actions taken in the light of those results.

The key results are as follows.



Main funding assessment

In funding the Plan, the Trustee's key objective is to ensure that there will be sufficient assets to meet all benefit payments as they fall due. With this in mind, the Trustee has set a target reserve for the Plan based on a prudent estimate of the amount needed to meet all payments in respect of the benefits earned up to the valuation date.

The funding assessment gives a target reserve of £129.5 million as at 1 May 2014. This compares with an asset value at the same date of £90.8 million. Thus, there was a funding deficit of £38.7 million and a funding level (assets as a percentage of the target reserve) of 70%.

The previous valuation was undertaken as at 1 May 2011. That valuation revealed a funding deficit of £32.3 million. The key influences on the funding position between the two valuations were as follows:

- Significant decrease of gilt yields, leading to a higher value being placed on the Plan's liabilities
- Deficit contributions paid into the Plan

In order to address the funding shortfall, the Employer has agreed with the Trustee a recovery plan. The aim of the recovery plan is that the shortfall will be made up over a period of 12 years by making contributions to the Plan at the rate of £2.97 million per annum in equal monthly instalments commencing 1 May 2015 and increasing by 3% each May thereafter.

Executive Summary

Neutral assessment

In addition to the main funding assessment, I have completed calculations using what I consider to be a 'neutral' set of assumptions. The approach is similar to that taken by the Trustee for the main funding assessment, except that the neutral assumptions do not contain any margins for prudence. Under my neutral assumptions, the value placed on the Plan's liabilities was £109.7 million giving a shortfall on that assessment of £19.6 million.

Winding-up assessment

I have also completed a winding-up assessment of the Plan. This determines the extent to which the Plan's assets would be sufficient to secure members' benefits by the purchase of insurance policies if the Plan were to be wound up. The winding-up assessment places a value on the Plan's liabilities of £181.3 million, compared with the asset value of £91.8 million. This gives a winding-up funding level of 51%.

The winding-up liabilities are much higher than the ongoing funding liabilities because the estimated cost of purchasing insurance policies to secure the benefits is significantly higher than the anticipated cost of providing the benefits from the Plan's assets.

1. Introduction

Background and purpose

- 1.1 The Trustee of The YMCA Pension and Assurance Plan ('the Plan') has undertaken a formal valuation of the Plan as at 1 May 2014.
- 1.2 The purpose of this report is to provide a formal record of the valuation, including the approach adopted by the Trustee, the results obtained and the actions taken as a result.
- 1.3 The report is addressed to the Trustee. Legislation requires the Trustee to make it available to the Principal Employer within 7 days of receipt.

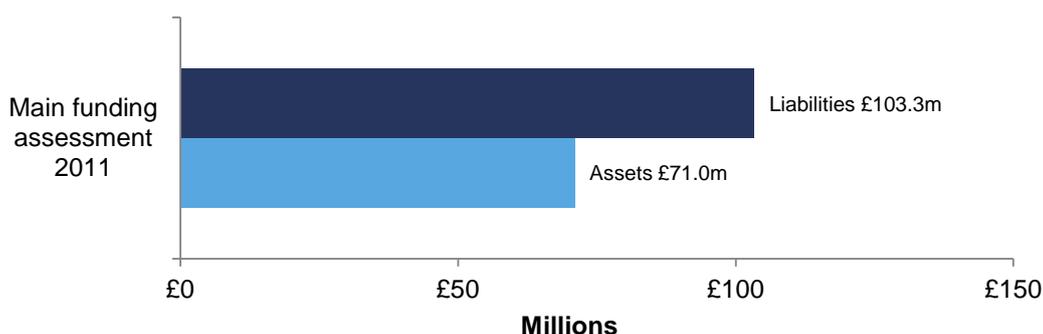
This work comes under the scope of the Technical Actuarial Standards on Reporting Actuarial Information, Data, Modelling and Pensions, issued by the Financial Reporting Council. I confirm that my work complies with those standards.

This report is solely for the purposes outlined above. It should not be relied upon for any other purpose and it should be noted that neither I nor Xafinity Consulting Limited accept liability to any third party in respect of the contents.

Significant events since the previous valuation

- 1.4 The previous valuation was undertaken with an effective date of 1 May 2011. That valuation revealed a funding deficit of £32.3 million.

The Result of the Main Funding Assessment at the Previous Valuation



- 1.5 Since then there have been a number of events which have had a substantial impact on the Plan. The foremost among these are as follows.
 - Significant decrease of gilt yields leading to lower discount rates and therefore an increased value being placed on the Plan's liabilities
 - Deficit contributions paid by the Employers

2. Membership, Benefits and Assets

Membership data

- 2.1 I have been provided with membership data by the Xafinity administration team. I have performed a number of checks on the data and I am satisfied that it is sufficiently accurate for the purposes of this valuation.
- 2.2 A brief summary of the data used is set out in the table below. More details may be found in Appendix A.

	Valuation as at 1 May 2014	Valuation as at 1 May 2011
Deferred pensioners		
Number	1,046	1,204
Average age (liability weighted)	53.9	53.2
Accrued pensions at date of leaving (£millions)	2.678	3.268
Pensioners		
Number	590	501
Average age (liability weighted)	68.5	68.1
Pensions in payment at valuation date (£millions)*	2.220	1.532

*The annual pensions shown are just those currently in payment from the Plan.

Benefits

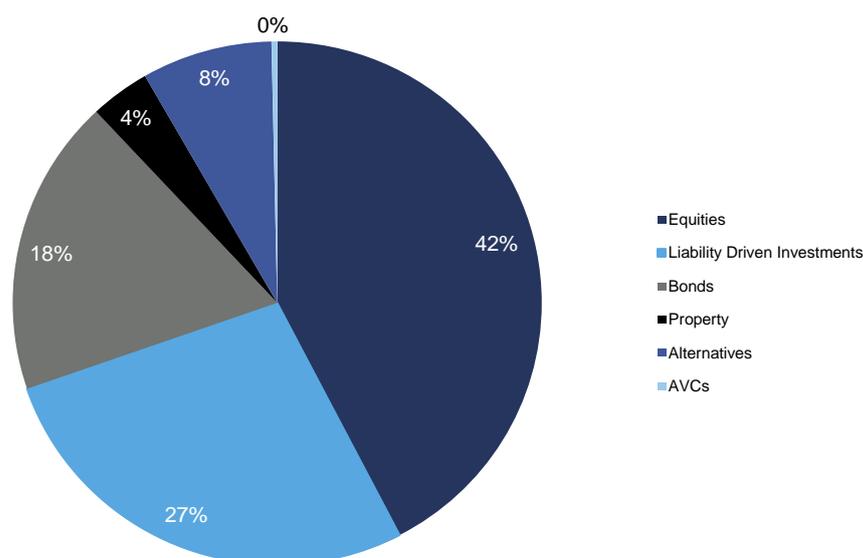
- 2.3 I have valued the benefits as set out in Appendix B. A more detailed and definitive benefit structure is contained in the Trust Deed and Rules.
- 2.4 No allowance has currently been made to equalise the accrual of GMPs for males and females, in line with the majority of contracted-out pension schemes. There is currently considerably debate about what exactly the law requires by way of equalisation. Until this is resolved the financial impact of equalising GMPs remains uncertain. Therefore I have made no allowance in the valuation for the equalisation of GMPs.
- 2.5 The Plan does not have a recent history of awarding discretionary benefits to members. Accordingly, I have made no allowance in my calculations for the granting of such benefits.

2. Membership, Benefits and Assets

Assets

- 2.6 I have taken the value of the Plan's assets from the Trustee's audited Report and Accounts as at 1 May 2014. The accounts state that at that date the Plan had invested assets of £78.5 million (excluding AVCs). The following chart illustrates how those assets were invested.

Distribution of Invested Assets as at 1 May 2014



- 2.7 The distribution of assets at the valuation date reflects the Trustee's stated strategy of 'de-risking' the Plan over the long term using a dynamic trigger based de-risking framework. Further details may be found in Appendix C.
- 2.8 In addition to the assets set out above, the accounts show that there were net current assets of £5.3 million. This gives a total asset value (excluding AVCs) of £83.8 million for use in my assessment, as follows.

	Assets as at 1 May 2014 £millions	Assets as at 1 May 2011 £millions
Invested assets (other than AVCs)	78.5	63.4
Net current asset / (liability)	5.3	0.4
Total available assets	83.8	63.8

- 2.9 A number of Plan pensions are paid from annuity policies held in the name of the Trustee. In the valuation calculations, I have shown the value of these as both an asset and liability.

3. The Funding Approach and Assumptions

The funding objective

- 3.1 The Trustee's key funding objective is to ensure that there will be sufficient assets to meet all benefit payments as they fall due.
- 3.2 With this in mind, the Trustee has a funding target for the Plan based on a prudent estimate of the amount needed to meet those payments.

Methodology

Benefits already accrued

- 3.3 In funding the Plan, the Trustee has assumed that it will continue in its current form in the long term, with benefits being paid directly from Plan assets. They have also adopted the Accrued Benefit actuarial funding method.
- 3.4 The valuation calculations determine the assets needed to meet benefit payments in this way. The calculations include an allowance for the invested assets to grow between the valuation date and the time that the benefits are paid.

Funding assumptions

- 3.5 Placing a value on the Plan's liabilities requires a number of assumptions to be made about the future. Such assumptions include how long members might live after retiring and the return that will be generated by the Plan's assets.
- 3.6 After taking advice from the Scheme Actuary the Trustee has adopted what they consider to be 'prudent' funding assumptions, having regard to the Employer covenant and to financial market conditions. The Trustee's assumptions are prudent in that they are deliberately cautious about the future. Using such assumptions increases the target funding reserve and reduces the risk that the combination of the accumulated assets and future contributions will prove to be inadequate.

Neutral assumptions

- 3.7 Although funding requires the use of prudent assumptions, it is instructive to compare the Trustee's prudent funding assumptions with what I consider to be 'neutral' assumptions – that is, with assumptions which do not contain any deliberate margins for prudence.
- 3.8 Some of the key assumptions selected by the Trustee are set out in the following tables, alongside the assumptions adopted for the previous valuation and my neutral assumptions. A more extensive summary is set out in Appendix E, while full details may be found in the Trustee's Statement of Funding Principles.

3. The Funding Approach and Assumptions

Financial assumptions

3.9 The financial assumptions are based on financial market statistics, in particular the yields on fixed interest and index-linked government bonds. Changes in these underlying statistics, and a smaller allowance for outperformance above the Plan assets on the post retirement discount rate mean that both the pre and post retirement discount rate have decreased significantly. The inflation assumptions have also decreased as a result of changes in the underlying statistics.

	Funding Assumptions at 1 May 2014	Neutral Assumptions at 1 May 2014	Funding Assumptions at 1 May 2011
Discount rate before retirement	5.35%	6.35%	6.20%
Discount rate after retirement	3.85%	4.35%	4.95%
Future price inflation (RPI)	3.30%	3.20%	3.40%
Future price inflation (CPI)	2.80%	2.20%	2.90%

Demographic assumptions

3.10 The most important demographic assumption is that for the future life expectancy of members. As part of the valuation process the Trustee reviewed the prospects for members' life expectancies. As a result, they updated their assumptions to take account of the most recently available data. Sample assumed life expectancies are set out in the table overleaf, along with some of the other key demographic assumptions.

3. The Funding Approach and Assumptions

	Funding Assumptions at 1 May 2014	Neutral Assumptions at 1 May 2014	Funding Assumptions at 1 May 2011
Sample life expectancies			
– Male currently age 65	87.6	86.2	87.7
– Female currently age 65	89.6	88.1	90.1
– Male currently age 45	89.8	87.6	89.6
– Female currently age 45	91.9	89.6	91.9
Commutation for cash lump sum on retirement	75% commute 25% of pension for cash	75% commute 25% of pension for cash	75% commute 25% of pension for cash
Retirement	At normal retirement age	At normal retirement age	At normal retirement age

Other considerations

- 3.11 A number of pensions are paid using the proceeds of insurance policies held in the name of the Trustee. I have shown the value of these as both a liability and an asset although, as the proceeds from these policies will generally match the associated benefits, they could equally be excluded from my assessment.
- 3.12 Whilst the Plan is continuing, expenses, including statutory levies, are paid directly by the Participating Employers. Hence, I have not included an explicit expense reserve in my calculation.

4. Results

Benefits accrued before the valuation date

Cashflows

- 4.1 The valuation calculations project all future benefit payments earned in respect of pensionable service to the date of the valuation using a set of assumptions about the future.
- 4.2 Next, we calculate the amount of money that would need to be set aside now in order to meet all of these projected cashflows exactly. Because we expect any money invested to grow between now and the time the benefits are paid, the amount that would need to be set aside is typically less than the total of the projected cashflows. The amount to be set aside is known as the 'present value' of the liabilities.
- 4.3 The nature of the cashflows quantified varies for each member, some are fixed in nature while others will be linked to inflation. As the Plan currently pays pensions from the fund the cashflows have a relatively long term.
- 4.4 A full cashflow analysis over the lifetime of the Plan would show how the size of the Plan varies with time. I have carried out a cashflow analysis to assist with the Plan's investment strategy but do not consider it materially affects this funding report.

4. Results

The funding position

- 4.5 The Trustee's funding target, known in legislation as the 'technical provisions', is the amount needed at the valuation date to meet the projected benefit payments as they fall due. It is therefore the result of a planning (budgeting) exercise. The funding target and the current funding position are as follows:

	Funding Assessment as at 1 May 2014 £millions	Funding Assessment as at 1 May 2011 £millions
Past service liabilities		
Deferred pensioners	75.1	62.5
Current pensioners	47.4	29.4
Insured pensioners	7.0	7.2
Former Participating Employers*		4.2
Total past service liabilities (L) (Funding target or 'technical provisions')	129.5	103.3
Assets		
Total assets shown in accounts	83.8	63.8
Insured pensioners	7.0	7.2
Total assets (A)	90.8	71.0
Funding surplus or (deficit) (A minus L)	(38.7)	(32.3)
Funding level (A as a percentage of L)	70%	69%

*The liability attributable to the Former Participating Employers is now valued on an ongoing basis, in contrast to the previous valuation when this liability was valued on a buyout basis. This figure is now included within the Deferred and Pensioner liabilities shown above.

Reconciliation with the results of the previous valuation

- 4.6 The funding position has slightly improved since the previous valuation was undertaken although the deficit itself has increased. I have analysed the reasons for the change and my findings are set out below. It should be noted that many of the factors influencing the results are fundamentally interconnected. As such, the financial impact ascribed to each individual factor will necessarily be approximate.

4. Results

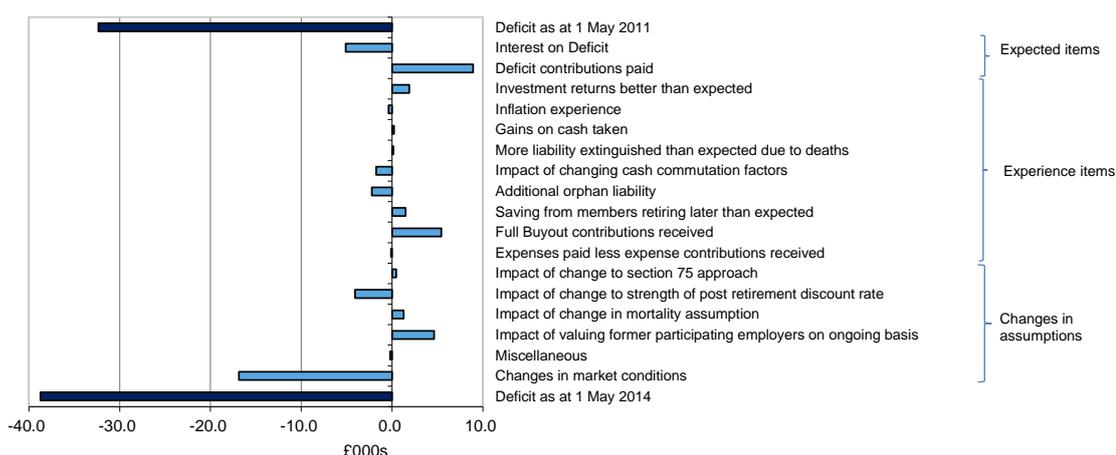
4.7 The most significant influences on the funding position have been as follows;

- Decrease in underlying gilt yields leading to a decrease in both pre and post-retirement discount rates and hence an increased value placed on the Plan's liabilities
- Deficit reduction contributions paid by the Participating Employers

4.8 A more detailed reconciliation is set out in the following chart. Within the chart, I have grouped the items into;

- Those items which would have been expected if experience since the previous valuation had been in line with the assumptions
- Those items due to experience differing from the assumptions made at the previous valuation
- Those items due to changes in assumptions

Reconciliation of the Positions at 1 May 2011 and 1 May 2014



4.9 Further information on the investment returns and the contributions paid in the period between the two valuations may be found in Appendix D.

4. Results

Addressing the deficit

- 4.10 In order to address the deficit the Trustee and the Employer have established a recovery plan. The aim of the recovery plan is for the deficit to be removed over a period of 12 years through employer contributions paid to the Plan at the rate of £2.97 million per annum, payable in equal monthly instalments commencing from 1 May 2015 and increasing by 3% at each 1 May thereafter.
- 4.11 The recovery plan will be regularly monitored by the Trustee and will be reviewed at the time of the next valuation, to ensure that it remains sufficient to address the funding shortfall.
- 4.12 All Plan expenses, including levies, are met by the Participating Employers and so are not included within the contributions above.

Funding risks and the sensitivity of the results to the assumptions

- 4.13 In funding the Plan the Trustee will face a number of risks that may affect their ability to meet their funding objective. For example, investment returns might fall short of the levels assumed or the Participating Employers may become less able to make further contributions to the Plan.
- 4.14 The extent of some of these risks can be illustrated by varying some of the valuation assumptions. A summary of some of the main funding risks, along with an illustration of the effects of changing some of the key valuation assumptions, is set out in Appendix F.

4. Results

Neutral assessment

- 4.15 To give the Trustee an insight into the degree of prudence in the funding target, I have also valued the Plan using neutral assumptions – that is, using assumptions which in my opinion contain no margins for adverse experience. The chart below sets out the results of my assessment alongside the funding results.

	Neutral Assessment as at 1 May 2014 £millions	Funding Assessment as at 1 May 2014 £millions
Total past service liabilities (L)	109.7	129.5
Total assets (A)	90.1	90.8
Funding surplus or (deficit) (A minus L)	(19.6)	(38.7)
Funding level (A as a percentage of L)	82%	70%

- 4.16 The comparison between the neutral and funding assessments shows how extensive the allowance for prudence is within the funding reserve. As a result, the financial position under the neutral assessment looks stronger due to no margins for prudence.

5. Winding-Up Assessment

Background

- 5.1 The results set out in Section 4 of this report are based on the assumption that benefits will continue to be paid from the Plan for the remainder of its lifetime.
- 5.2 In addition to providing those 'ongoing' results, I am also required to assess the funding position of the Plan if it were to close immediately, with all benefits being secured by the purchase of insurance policies. Providing this winding-up or "solvency" assessment is a statutory requirement; it does not imply that the Plan is to be wound up.
- 5.3 Providing benefits by purchasing insurance policies is typically much more expensive than providing benefits directly from Plan assets. This is partly because insurers include margins for profit and operating expenses in their prices, but is mainly because insurers provide guaranteed benefits and are required to follow conservative investment strategies.

Approach taken

- 5.4 The only accurate way to assess the true cost of winding up would be to obtain quotations from a number of insurance companies. I have not done this, but instead have estimated the cost using principles similar to those adopted by insurers when pricing annuities. This is therefore a valuation exercise producing an indicative market value. Clearly, this approach will not be as accurate as obtaining actual quotations, but I am satisfied that it is sufficient for the present purpose. Full details of the approach taken are set out in Appendix E.

Results

	Winding-up Assessment as at 1 May 2014 £millions
Winding-up liabilities	
Deferred pensioners	116.7
Current pensioners	55.6
Insured Pensioners	8.0
Winding-up and payment expenses	1.0
Total winding-up liabilities (L)	181.3
Assets	
Total assets shown in accounts	83.8
Insured pensioners	8.0
Total assets (A)	91.8
Winding-up surplus or (deficit) (A minus L)	(89.5)
Winding-up funding level (A as a percentage of L)	51%

5. Winding-Up Assessment

- 5.5 The funding level on winding-up (51%) is much lower than the ongoing funding level set out in Section 4 of this report (70%). This is due to the difference between the anticipated cost of providing the benefits from the Plan and the cost of guaranteeing those benefits through the purchase of insurance policies.

Winding up on the insolvency of the employers

- 5.6 If a pension scheme sponsor fails at a time when there are insufficient assets to secure all benefits with an insurer, the shortfall becomes a debt due from the employer to the scheme. The extent to which any or all of that debt can in practice be recovered by the trustees will depend on the value that can be realised from what remains of the sponsor's assets and the priority given to other creditors.
- 5.7 If the debt is not recovered in full, the assets will not be sufficient to secure all benefits. In such cases, current legislation aims to ensure that members receive at least a specified proportion of their entitlements. This may be through the trustees purchasing insurance policies, where possible, or may be through the government's pensions lifeboat, the Pension Protection Fund (PPF).
- 5.8 The "compensation" paid by the PPF is based on the benefits accrued by each member within their own pension scheme, but with some adjustments. For example;
- Pensions for members yet to reach Normal Pension Age are restricted so that they are no greater than a limit set by the PPF.
 - Members yet to reach their Normal Pension Age have their benefits reduced by 10%.
 - No increases are applied to pension accrued before April 1997.
 - Increases to pension accrued after April 1997 are limited to a maximum of 2.5% each year (or the increase in the Consumer Prices Index if lower).
- 5.9 If a pension scheme does not have sufficient funds to secure the equivalent of PPF compensation then it is likely to enter the PPF. If, on the other hand, the assets are sufficient to secure PPF compensation then the scheme's trustees must first apply the available assets according to the order set out in legislation, and then any balance in accordance with their trust deed.

5. Winding-Up Assessment

5.10 The following table sets out the order of priority that the Trustee would follow if the Employer were to become insolvent. It also sets out the extent to which the assets available at the valuation date could secure the benefits in each category.

	Winding-up Assessment as at 1 May 2014 Proportion of Benefits Covered by Plan Assets
1 - AVCs	100%
2 - Benefits up to the PPF level	69%
3 - Benefits above the PPF level	0%

5.11 At 1 May 2014, the Plan did not have sufficient assets to secure the equivalent of PPF benefits. If the Employer had become insolvent at that time, and if no additional funds were secured, the Plan would have been likely to enter the PPF and members would have received the benefits described in paragraph 5.8.

6. Next Steps and the Next Valuation

Next steps

- 6.1 The signing of this document together with the Statement of Funding Principles, the Recovery Plan and Schedule of Contributions concludes the valuation formalities. The next step is for me, on behalf of the Trustee to submit details of the valuation to the Pensions Regulator.

The next valuation

- 6.2 The next formal valuation of the Plan is due to take place as at 1 May 2017. Below, I project the ongoing and winding-up positions to the next valuation date.
- 6.3 The future is uncertain and it is inevitable that the true position will differ from my projection. In particular, financial market conditions can be very volatile, especially over short periods. This could mean that the actual asset and liability values turn out to be substantially higher or lower than the projected values.
- 6.4 Such uncertainty and variability is already demonstrated by the experience since the valuation date. During that period
- gilt yields have continued to decline
 - Equity markets have continued to be volatile

And will have increased the value of liabilities, thus increasing the deficit.

Method of projection

- 6.5 In order to produce the projection I have assumed that over the period to the next valuation:
- Investment performance will be in line with the discount rates used in the funding assessment plus a premium of 0.5%
 - Other items of experience will be in line with the assumptions for each assessment
 - There will be no change to the funding principles established in the course of the present valuation
 - The terms available in the insurance market will continue to be as set out in Appendix E.

6. Next Steps and the Next Valuation

6.6 Please note in particular that I have not made allowance for changes in financial conditions between the valuation date and the date of this report. As mentioned above this period has been negative and unless this experience reverses during the remaining period, it is likely that the future funding position will be worse than my projection.

Projected results – main funding assessment

6.7 The results of my projection of the main funding position are as follows.

	Projection to 1 May 2017 £millions	Valuation as at 1 May 2014 £millions
Total past service liabilities (L)	139.2	129.5
Total assets (A)	106.3	90.8
Ongoing surplus or deficit (A minus L)	(32.9)	(38.7)
Ongoing funding level (A as a percentage of L)	76%	70%

6.8 My projection is for an improvement in the funding position. This improvement is principally due to:

- Anticipated investment returns in excess of those allowed for in the main funding assessment.
- The substantial deficit reduction contributions due to be paid under the agreed recovery plan.

Projected results – winding-up

6.9 The results of my projection of the winding-up position are as follows.

	Projection as at 1 May 2017 £m	Valuation as at 1 May 2014 £m
Total past service liabilities (L)	190.3	181.3
Total assets (A)	107.3	91.8
Winding-up surplus or (deficit) (A minus L)	(83)	(89.5)
Winding-up funding level (A as a percentage of L)	56%	51%

6. Next Steps and the Next Valuation

- 6.10 My projection is for an improvement in the winding-up position. This change is principally due to:
- Anticipated investment returns in excess of those allowed for by insurers when pricing annuities.
 - The substantial deficit reduction contributions due to be paid under the agreed recovery plan.

Between now and the next valuation

- 6.11 Between now and the next valuation I will provide annual reports to the Trustee, setting out how the funding position has evolved and the key reasons for any changes.
- 6.12 These reports, along with regular reviews of the Employer covenant, will enable the Trustee to monitor the funding of the Plan. If it appears to them that the recovery plan is no longer likely to meet the funding objective, they should consider what remedial actions might be taken.
- 6.13 I look forward to continuing to work with the Trustee on these matters.

Signature:		Date:	4.3.15
Name:	Colin Stewart Price	Qualification:	Fellow of the Institute and Faculty of Actuaries
Address:	Phoenix 1 Station Hill Reading Berks RG1 1NB	Employer:	Xafinity Consulting Limited

Appendix A – Membership Data

In this appendix I present a summary of the membership data used in my assessment and how this data compares with that used for the previous valuation.

Deferred pensioners

	Current Valuation as at 1 May 2014			Previous Valuation as at 1 May 2011		
	Number	Deferred Pensions (£m)	Average Age	Number	Deferred Pensions (£m)	Average Age
Males	463	1.659	54.6	552	2.031	53.9
Females	583	1.019	52.7	652	1.237	52.2
Total	1,046	2.678	53.9	1,204	3.268	53.2

Pensioner members

	Current Valuation as at 1 May 2014			Previous Valuation as at 1 May 2011		
	Number*	Pensions in payment** (£m)	Average Age	Number	Pensions in payment (£m)	Average Age
Males	287	1.540	69.3	248	1.097	68.4
Females	303	0.680	67.0	253	0.435	67.3
Total	590	2.220	68.5	501	1.532	68.1

*The above table shows the number of pensioner members and includes both plan pensioner members and insured pensioner members.

**The annual pensions shown are just those currently in payment from the Plan.

In addition to these Plan paid pensions, there are a number of pensions being met through insured annuity contracts. At the current valuation date the insured pensions totalled £612,850 p.a.

Appendix B – Plan Benefits

In this section, I present a summary of the Plan benefits.

I have valued the benefits set out in the Plan Rules dated 1 October 2012, with allowance for any subsequent changes in prescriptive legislation and for such other benefits as agreed between the Trustee and Employer as notified to me.

With effect from 1st May 2007 benefits ceased to accrue. Following this date active members became employed deferred members, retaining a salary link to their benefit entitlements but with an underpin equal to the benefit based on their 1 May 2007 Final Pensionable salary plus revaluations to their actual date of leaving active service or to 1 May 2011 for those still in employment at that date. With effect from 1st May 2011 this salary link was broken and these members became deferred members.

The Plan is closed to new entrants and accordingly no allowance for new entrants has been made in the valuation calculations.

The following summarises the benefit structure of the Plan. The Plan was contracted-out of the State Second Pension arrangement on a salary-related basis.

In 2010 the government announced that it would increase State benefits as well as State pensions and public sector pensions by reference to CPI rather than RPI from April 2011.

The Plan rules state that leaver benefits in relation to service after 1 December 2001 revalue in line with statutory revaluations and hence I have assumed that benefits revalue in line with CPI in deferment for future periods. In contrast, pension increases for post-1997 service are explicitly linked to the RPI.

The table that follows provides a summary of the Plan albeit that certain elements are no longer relevant now that there are no active members.

Appendix B – Plan Benefits

Pensionable Service	A member's last or only continuous period of service as an employee, expressed as years and complete months, and including any additional service (e.g. via a transfer in or a re-admission). Pensionable Service is limited to a maximum of 40 years.
Pensionable Salary	The annual rate of the Member's Earnings at the Plan Anniversary date
Final Pensionable Salary (FPS)	The highest average Pensionable Earnings at any three consecutive Plan Anniversary Dates in the 10 years prior to the member completing Pensionable Service
Normal Pension Age (NPA)	60, 63 or 65 depending on date of joining
Retirement Benefit	<p>Pension – 1/60th of Final Pensionable Earnings for each year and complete month of Pensionable Service up to a maximum of 40/60ths of the member's Final Pensionable Earnings.</p> <p>Lump sum – The option to convert some of the pension above (in excess of any GMP) into a cash lump sum</p>
Early Retirement	<p>Ill health – The accrued pension as at date of early retirement, reduced by the Early Retirement Discount (as explained in the Plan rules). The Trustee may disapply all or part of the Early Retirement Discount at their discretion.</p> <p>Other – The accrued pension as at date of early retirement, reduced by the Early Retirement Discount (as explained in the Plan rules)</p>
Benefits on withdrawal	<p>Less than 24 months – Members who joined the Plan before 1 December 2001 are entitled to a deferred pension or a refund of contributions. Members who joined the Plan on or after 1 December 2001 are entitled to a refund of contributions.</p> <p>At least 24 months – Entitled to a deferred pension preserved within the Plan</p>
Death after Retirement	<p>Spouse's pension – 50% of the member's pension (before any cash commutation). This may be reduced if the Qualifying Spouse is more than 10 years younger than the member.</p> <p>Lump sum – If death occurs within 5 years of the pension starting, a lump sum equal to the remainder of the pension payments due within that 5 year period, with no allowance for pension increases</p>

Appendix B – Plan Benefits

Death of Deferred Pensioner	<p>Spouse's pension – An immediate pension equal to the member's GMP and the Reference Pension (the pension in respect of the member's Contracted-out Employment after 5 April 1997).</p> <p>Lump sum – A lump sum equal to the member's contributions</p>
Deferred Pension Revaluation	<p>Pensions in excess of GMP will be revalued as follows:</p> <p>The benefits for members who left before 1 January 1986 are not revalued in deferment.</p> <p>For members who left Service on or after 1 January 1986 but before 1 January 1991:</p> <ul style="list-style-type: none"> • Pension accrued in respect of Pensionable Service on or after 1 January 1985, 5% per annum compound, • Pension accrued in respect of Pensionable Service before 1 January 1985, 0% per annum. <p>For members who joined the Plan before 1 December 2001 and left Service on or after 1 January 1991:</p> <ul style="list-style-type: none"> • Pension accrued in respect of Pensionable Service on or after 1 January 1991 and up to but not including 1 December 2001, 5% per annum compound, • Pension accrued in respect of Pensionable Service on or after 1 December 2001, in line with the statutory revaluation requirements. <p>For members who joined the Plan on or after 1 December 2001, in line with the statutory revaluation requirements.</p>
Pension Increases	<p>For pensions commencing before 10th October 1987, 2.5% per annum compound.</p> <p>For pensions commencing on or after 10 October 1987 but before 6 April 1997, 3% per annum compound.</p> <p>For members who joined the Plan before 1 December 2001 and who retire on or after 6 April 1997,</p> <ul style="list-style-type: none"> • for pension accrued prior to 6 April 1997, 3% per annum compound • for pension accrued on or after 6 April 1997, the annual percentage increase in the Retail Price Index, rounded to the nearest 0.1%, subject to a minimum of 3% and a maximum of 5% per annum <p>For members who joined the Plan on or after 1 December 2001, the annual percentage increase in the Retail Price Index, rounded to the nearest 0.1%, subject to a maximum of 5%.</p>

Appendix C – Assets and Investment Strategy

Assets held at the valuation date

The Plan's assets are invested with;

- Mercer, who manage the Plan's equity, bond and LDI portfolios.
- Schroder, who manage the Plan's property portfolios.

The following table summarises the assets held at the valuation date.

	£'000s
Equities	33,375
Bonds	14,450
LDIs	21,525
Property	2,889
Alternatives	6,280
Total invested assets	78,519
AVCs	267
Net current assets / (liabilities)	5,291
Total assets in Plan accounts	84,076

The investment strategy

The assets held at the effective date of the valuation broadly reflected the Trustee's investment strategy, as set out in the Trustee's statement of investment principles. The key decision in the investment strategy was to seek a long term solution to 'de-risk' the Plan's assets relative to its liabilities over time.

Appendix D – Experience since the Previous Valuation

Financial market conditions

In the period between 1 May 2011 and 1 May 2014 financial markets suffered substantial volatility. The following chart sets out how total returns on some of the key asset classes evolved over that time.



It can be seen that;

- equities yields suffered a steep decline early on in the period and have since generally increased over time
- bond yields initially increased quite steadily but have recently seen a decline in growth

The returns on the market as a whole translated into volatile returns on the Plan's investments. The following table sets out the approximate return on the Plan's investments between the two valuations.

Year Ending	Approximate Return on Whole Portfolio
30 April 2012	4.6%
30 April 2013	15.1%
30 April 2014	-5.0%

These returns have been estimated using the information provided in the Plan's audited financial statements.

Appendix D – Experience since the Previous Valuation

Contributions paid to the Plan

Following the completion of the 1 May 2011 valuation, the Trustee agreed with the Participating Employer a recovery plan. That plan required additional contributions from the Participating Employer at an annual rate of £2.97 million, payable in equal monthly instalments, commencing 1 May 2012 and increasing by 3% each 1 May thereafter. The shortfall was expected to be eliminated in 2023 (11 years).

The contributions actually paid between the two valuations were as follows.

Year Ending	Deficit Reduction Contributions	Contributions in relation to Employer's full buyout payments	Total
1 May 2012	3,249,554	10,366	3,259,920
1 May 2013	3,433,923	41,367	3,475,290
1 May 2014	3,654,178	5,371,449	9,025,627
Total	10,337,655	5,423,182	15,760,837

The auditors have confirmed that the contributions paid in all material respects were in line with the schedules of contributions in force over the period.

Appendix E – Assumptions

Key financial assumptions

	Funding Assumptions at 1 May 2014	Winding-up Assumptions at 1 May 2014	Neutral Assumptions at 1 May 2014	Funding Assumptions at 1 May 2011
Discount rate before retirement	5.35%	3.25%	6.35%	6.20%
Discount rate after retirement	3.85%	3.06%	4.35%	4.95%
Future price inflation (RPI)	3.30%	n/a	3.20%	3.40%
Future price inflation (CPI)	2.80%	3.64%	2.20%	2.90%

Pension increase assumptions

	Funding Assumptions at 1 May 2014	Winding-up Assumptions at 1 May 2014	Neutral Assumptions at 1 May 2014	Funding Assumptions at 1 May 2011
Revaluation of deferred pensions before retirement (CPI max 5%)	2.80%	3.64%	2.20%	2.90%
Pension increases in payment				
LPI max 5% min 3%	3.55%	3.76%	3.50%	3.60%
LPI max 5%	3.30%	3.59%	3.20%	3.40%

Appendix E – Assumptions

Demographic assumptions

	Funding Assumptions at 1 May 2014	Winding-up Assumptions at 1 May 2014	Neutral Assumptions at 1 May 2014	Funding Assumptions at 1 May 2011
Mortality				
Base table	SAPS S2PxA	90% SAPS S1PxA	SAPS S2PxA	PCxA00
Projection	CMI 2013 tables with 1.5% long term improvement	CMI 2012 tables with 1.5% (M) / 1% (F) long term improvement	CMI 2013 tables with 1% long term improvement	Medium Cohort with 1% floor
Age adjustment	N/A	N/A	Assume members are aged 1 year older	N/A
Commutation	75% commute 25% of pension	Nil	75% commute 25% of pension	75% commute 25% of pension
Retirement	All members are assumed to retire at the earliest age at which they are entitled to all of part of their pension unreduced	All members are assumed to retire at the earliest age at which they are entitled to all of part of their pension unreduced	All members are assumed to retire at the earliest age at which they are entitled to all of part of their pension unreduced	All members are assumed to retire at the earliest age at which they are entitled to all of part of their pension unreduced

For more details of the assumptions please refer to the Trustee's Statement of Funding Principles dated March 2015.

Appendix F – Risks and Sensitivity

Funding risks

There are a number of funding risks which might ultimately affect the Trustee's ability to pay benefits to members. Foremost among these are the risks relating to;

- **Funding shortfalls** – If experience turns out to be less favourable than was assumed for the funding assessment, the funding level will be lower than anticipated. In that event additional contributions would be required from the Participating Employers.
- **Employer covenant** - The Participating Employers may become less able or less willing to continue to make contributions to the Plan.

Key factors which could cause a funding shortfall

- **Investment performance** – investment returns below those assumed will cause a shortfall to emerge. This risk is greatest in pension schemes with a high proportion of assets invested in more volatile assets such as equities.
- **Changes in bond yields** – the discount rates used in the valuation are based on yields on government bonds. In the event that the yields on these bonds fall, the discount rates will fall also. This increases the funding target, worsening the funding position.
- **Life expectancies** – if members live longer than has been allowed for, then benefits will need to be paid for a longer period, worsening the funding position.
- **Weakened covenant** – if the Participating Employers' covenant weakens, greater prudence will be needed in the funding assumptions and that will lead to higher liabilities.

Risk mitigation measures

The Trustee has taken a number of actions to mitigate the risks. These include:

- Funding
 - The assumptions used in the funding assessment have been chosen prudently, making it less likely that experience will turn out to be worse than assumed.
- Investment
 - The Trustee has an investment strategy which aims to 'de-risk' the Plan over time, and currently invests in some bonds and LDI-type investments. Movements in the value of these assets act to partially offset movements in the funding target when bond yields change.

Appendix F – Risks and Sensitivity

- Monitoring
 - Regular updates are received by the Trustee to keep abreast of any changes in the Participating Employers’ covenant and the funding position.

Despite these risk mitigation measures, substantial funding risk remains. In future the Trustee may wish to consider further measures to reduce risk.

Funding level sensitivity

To give the Trustee an idea of the extent of some of the key risks, I set out below the sensitivity of the funding level to market movements and to the assumptions made. Please note that these calculations are approximate and intended for illustration only.

Sensitivity to investment performance – sudden market movements

	Equity markets 20% lower	Asset value at valuation date	Equity markets 20% higher
Assets	84.1	90.8	97.5
Liabilities	129.5	129.5	129.5
Surplus or (deficit)	(45.4)	(38.7)	(32.0)

Sensitivity to assumptions – investment returns

	Lower discount rate	Discount rate	Higher discount rate
	0.5% lower	5.35% before retirement 3.85% after retirement	0.5% higher
Assets	91.1	90.8	90.5
Liabilities	141.3	129.5	119.1
Surplus or (deficit)	(50.2)	(38.7)	(28.6)

Sensitivity to assumptions - future inflation

	Lower future inflation	Assumed future inflation	Higher future inflation
	0.5% lower	RPI at 3.30%p.a. and CPI at 2.80%p.a.	0.5% higher
Assets	90.8	90.8	90.8
Liabilities	126.1	129.5	133.5
Surplus or (deficit)	(35.3)	(38.7)	(42.7)

Appendix F – Risks and Sensitivity

Sensitivity to assumptions – life expectancies

	Life expectancies 1 year lower	Valuation assumptions	Life expectancies 1 year higher
Assets	90.4	90.8	91.1
Liabilities	125.1	129.5	133.7
Surplus or (deficit)	(34.7)	(38.7)	(42.6)

Appendix G – Certification of Technical Provisions

The YMCA Pension and Assurance Plan

Calculation of Technical Provisions

I certify that, in my opinion, the calculation of the Plan's technical provisions as at 1 May 2014 is made in accordance with regulations under section 222 of the Pensions Act 2004. The calculation uses a method and assumptions determined by the Trustee of the Plan and set out in the Statement of Funding Principles dated March 2015.

Signature:		Date:	4.3.2015
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