Actuarial valuation as at 31 March 2013

Cardiff and Vale of Glamorgan Pension Fund

Prepared for City and County of Cardiff
The Administering Authority of the Cardiff and Vale of Glamorgan Pension Fund

Prepared by Christine Rice FIA and Scott Campbell FIA
Aon Hewitt Ltd

Date 28 March 2014

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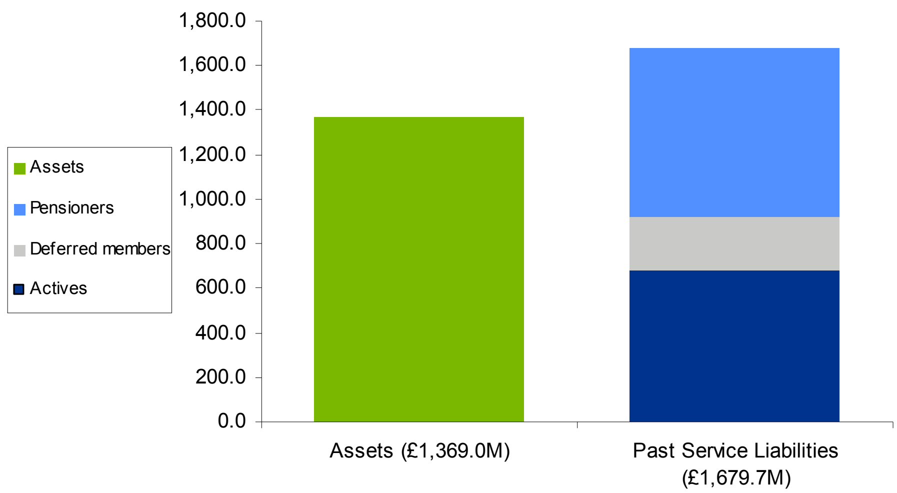
Executive Summary

The key results of the valuation as at 31 March 2013 are set out below.

There was a shortfall of £310.7M relative to the past service liabilities

(ie relative to the amount of assets agreed with the Administering Authority as being appropriate to meet members' benefits, assuming the Fund continues as a going concern).



The aggregate Employer future service contribution rate in respect of the benefits provided by the 2014 Scheme is 15.4% of Pensionable Pay.

The aggregate Employer contribution rate required to restore the funding ratio to 100% using a recovery period of 23 years from 1 April 2014, is 22.2% of Pensionable Pay (if the membership remains broadly stable and pay increases are in line with our assumptions from 1 April 2014). The comparable figure at the previous valuation was 23.2% of Pensionable Pay (using a recovery period of 25 years).

The contributions payable by each Employer may differ because they allow for each Employer's particular membership profile and funding ratio, and assumptions and recovery periods appropriate to their circumstances.

Actuarial valuation as at 31 March 2013
Cardiff and Vale of Glamorgan Pension Fund

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Introduction

This report has been prepared for the Administering Authority. It sets out the results and conclusions of the valuation as at 31 March 2013.

This is our actuarial valuation report. It draws together other pieces of work and advice from throughout the valuation process. Appendix 1 sets out the legal framework within which the valuation has been completed.

Throughout this report, assets and liabilities in respect of defined contribution additional voluntary contributions (or AVCs) have been excluded.

Some shorthand used in this report is explained opposite. Some technical pensions terms are explained in the Glossary in Appendix 12.

Shorthand

Fund

Cardiff and Vale of Glamorgan Pension Fund

Administering Authority

City and County of Cardiff, in its role as Administering Authority of the Fund

Employers

City and County of Cardiff, and other employers with employees participating in the Fund

Regulations

The Local Government Pension Scheme Regulations (see Appendix 12)

Pensionable Pay

As defined in the Regulations

Pensionable Service

Periods of membership, as defined in the Regulations

Snapshot view

The report concentrates on the Fund's financial position at the valuation date. As time moves on, the Fund's finances will fluctuate. If you are reading this report some time after it was produced, the Fund's financial position could have changed significantly.

Update since the previous valuation

The key results from the previous valuation as at 31 March 2010 were:

The Fund's assets were £1,031.2M and the past service liabilities were £1,461.7M, which corresponded to a shortfall of £430.5M and a **funding ratio** of 71%.

The aggregate Employer future service contribution rate was 14.9% of Pensionable Pay.

The Administering Authority agreed Employer contributions from 1 April 2011 designed to restore the funding ratio to 100% over a period not exceeding 25 years.

The resulting aggregate Employer contributions were

- The Employer future service contribution rate of 14.9% of Pensionable Pay; and
- Additional monetary amounts (after allowing for stepping of shortfall contributions for certain employers) as follows

Year from 1 April	Aggregate shortfall contribution (£M)
2011	21.2
2012	22.7
2013	24.4
2014	26.3
2015	27.7
2016	29.5
2017	30.9

The additional monetary amounts payable were then expected to increase from 1 April 2018 by 4.8% a year.

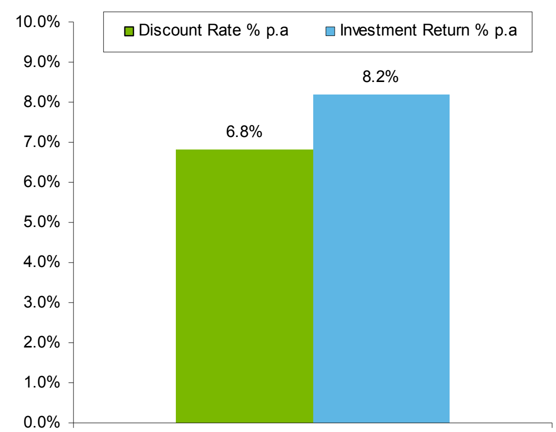
In addition the Employers paid any additional contributions required in respect of costs arising on early retirement or due to increases in benefits. Members also paid contributions as required under the Regulations.

Financial development

To illustrate the Fund's financial development since the previous valuation, we compare below key financial assumptions made at the previous valuation with what actually happened.

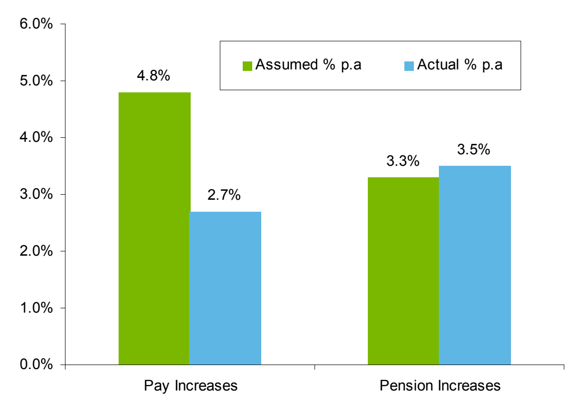
- **Investment return (or discount rate)**

  The investment return has been higher than the average discount rate assumed.



- **Inflationary pay and pension increases**

  Increases to pay were lower than assumed, while increases to pensions in payment were slightly higher than assumed.



Where material we show the financial impact of the above developments later in this report.

Other key developments since the previous valuation

As well as the contributions paid to the Fund since the previous valuation and the returns achieved on the Fund's assets, there have been the following material developments since the previous valuation:

- **Change to pension increases**

  The Government announced in 2010 that pension increases in deferment and payment for public sector pension schemes should be determined by reference to the Consumer Prices Index (CPI) rather than the Retail Prices Index (RPI) for all benefits in excess of Guaranteed Minimum Pensions (GMPs).

  This change was reflected in our previous valuation.

- **Changes to State Pension Age**

  State Pension Age is currently transitioning from age 65 (60 for women) to age 68. The Chancellor recently announced proposals for how further changes in State Pension Age will be linked to future changes in longevity. This will affect the age at which pensions will normally commence under the 2014 Scheme. This valuation does not allow for these latest proposals. We comment later in this report on the potential effect.

- **Bulk transfers**

  Since the previous actuarial valuation, terms have been agreed for the transfer of pension rights for staff who transferred to the Department of Constitutional Affairs on 1 April 2005. Under the agreement the Ministry of Justice will make 10 annual payments of £2,403,500 on each 15 April up to and including 15 April 2022. We have made allowance for the present value of these payments in our valuation.

- **2014 Scheme**

  A new scheme applies for Pensionable Service from 1 April 2014. The key features are:

  - Career average structure
  - Accrual rate of 49ths
  - Pensions revalued by CPI before retirement
  - Normal Pension Age linked to State Pension Age
  - Changes to member contribution rates, and in particular member contribution rates increased for those earning above £43,000 pa
  - Member contribution rates will be based on actual (previously full time equivalent) pay
  - Introduction of a 50/50 option, with member contribution rate and pension accrual rate both half rate
  - An underpin to pensions for members within 10 years of age 65 in April 2012.

  Benefits for Pensionable Service before 1 April 2014 are protected, and calculated by reference to current retirement ages; the link to final pay remains for active members.

  This valuation reflects our current understanding of the benefits to be provided by the new 2014 Scheme.

Membership data

This valuation is based on membership data as at 31 March 2013 supplied to us by the Administering Authority.

Summaries of the membership data are included in Appendices 2 and 3.

The chart below shows how the membership profile of the Fund has changed over the last three valuations.

Since the 2007 valuation, the Fund has experienced a small increase in the overall maturity of the Fund, with increases in the numbers of deferred members and pensioners.

Membership data

We have carried out some general checks to satisfy ourselves that:

- The information used for this valuation is sensible compared with the information used for the previous valuation and also with that shown in the Fund's Annual Report and Accounts.
- The results of this valuation are consistent with the results of the previous valuation.

However, the results in this report rely entirely on the accuracy of the information supplied. If you believe the data we have used may be incomplete or inaccurate, please let us know.

Pensionable Pay in the 2014 Scheme

We have been provided with Pensionable Pay for the year ended 31 March 2013, as defined for the 2008 Scheme. A different definition applies for benefits building up after 1 April 2014. In particular certain elements of pay which were previously not pensionable, will be included.

In this valuation, we have assumed that members have not received significant non pensionable pay, and hence that Pensionable Pay for membership before and after 1 April 2014 will be broadly similar.

If this is not the case, total Pensionable Pay after 1 April 2014 will be higher than allowed for. The impact on the results of our valuation would be as follows:

- We do not expect this to affect the cost of benefits building up as a percentage of Pensionable Pay, although the payroll to which this percentage is applied will be higher, increasing the cost in monetary terms.
- We do not expect this to affect past service liabilities prior to 31 March 2014 which will continue to be based on the current definition.
- Any shortfall contributions expressed as a percentage of pay will be applied to a higher payroll than anticipated. The shortfall might then be expected to reduce faster than assumed (if experience is otherwise as expected).

Benefits valued

Members are entitled to benefits defined in the Regulations. Different benefits apply to Pensionable Service before 1 April 2008, between 1 April 2008 and 31 March 2014, and after 1 April 2014. A summary of the benefits allowed for in our valuation is given in Appendix 4.

Discretionary benefits

Employers have discretion over payment of certain benefits and it is not practical to allow for the policies of each Employer. Most discretionary benefits are financed as they occur, so the financial impact on this valuation is minimal. No specific allowance has therefore been made for discretionary benefits which are granted at the discretion of the Employer.

GMP equalisation

The Government issued a consultation in 2012 on equalising Guaranteed Minimum Pensions (GMPs) between men and women. However, there remains considerable uncertainty about exactly how this will be carried out in practice. Therefore, at this stage, we have made no allowance for the equalisation of GMPs in the valuation.

State Pension Age changes

Normal Pension Age for Pensionable Service on or after 1 April 2014 will be State Pension Age. This is currently transitioning from age 65 (60 for women) to age 68 by 2046. Legislation to bring forward the increase to age 67 to 2028 is expected to be enacted in Spring 2014.

We have reflected these known increases in State Pension Age in this valuation. No allowance has been made for the Chancellor's recent announcement that State Pension Age might be linked to future increases in longevity. We comment further on this later in this report.

2013 Local Government Pension Scheme Regulations

The Local Government Pension Scheme Regulations 2013 and the Local Government Pension Scheme (Transitional Provisions, Savings and Amendment) Regulations 2014 come into force on 1 April 2014.

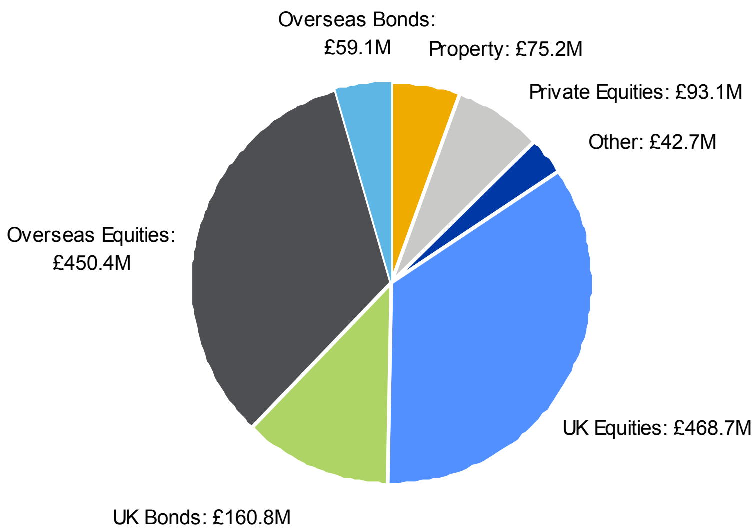
Our valuation reflects our understanding of the Regulations. Any future changes may affect the conclusions in this report.

We have made no allowance in this valuation for any future potential changes to member contributions or benefits resulting from the cost management mechanism under the Regulations.

Asset data

The audited accounts for the Fund for the year ended 31 March 2013 show the assets were £1,350.0M at the valuation date.

The assets of £1,350.0M were invested as follows:



- The audited accounts (and this summary) exclude assets for defined contribution AVC accounts.
- 'Other' comprises cash and net current assets.
- In our valuation we have then adjusted the assets shown above to allow for the present value of the annual payments of £2,403,500 which will be paid by the Ministry of Justice until 15 April 2022. We have calculated the present value of these payments to be approximately £19.0M.

The Statement of Investment Principles describes the Fund's investment strategy as follows:

'The investment policy of the Fund is intended to ensure that all statutory payments made from the Fund are at minimal cost to employing bodies.

The overall investment objective is to maximise investment returns and to minimise or at least stabilise future employer contributions over the long term within an acceptable level of risk…

…The Fund sets its own customised benchmark to ensure that the Fund's asset allocation policy reflects its own characteristics and not the average of a peer group. A customised benchmark and Fund Objective of a 75/25 Equities/Bonds allocation was set to minimise, or at least stabilise, future Employer contributions and to aim to avoid large variations. This approach was confirmed at the last review of the Fund Objective.'

Funding objective

Terminology

Past service liabilities

The funding target for a Fund agreed as part of the actuarial valuation.

Funding objective

To hold sufficient and appropriate assets to meet the past service liabilities.

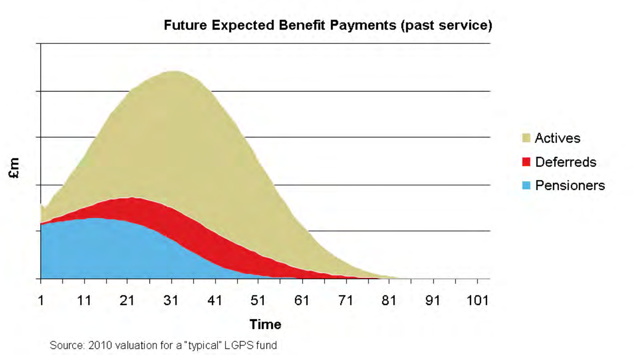
Funding strategy statement

Sets out the Administering Authority's strategy for meeting the funding objective.

The Administering Authority's funding objective is to hold assets which are at least equal to the past service liabilities.

In order to calculate the past service liabilities and the cost to the Employers of future benefit accrual, the benefits paid out by the Fund are estimated for each year into the future. The estimated benefit payments are then 'discounted back' to the valuation date using an agreed rate of interest known as the discount rate.

The benefit payments from the Fund are expected to be made for a very long period – the chart below shows the cashflow pattern for the current membership of a typical Fund. Some cashflows will be fixed but others will be linked to future levels of salary growth and inflation.



The discount rate

The funding strategy statement describes the risk based approach used to set the funding strategy and hence the discount rate. Under this risk based approach:

- The discount rate for long term scheduled bodies assumes indefinite future investment in assets similar to the Fund's holdings at the valuation date (allowing for any known planned changes to the long term investment strategy).

  The Fund assets are considered to have a better than evens chance of delivering investment returns in excess of the scheduled body discount rate.
- For orphan bodies, the discount rate has regard to the possibility that participation might cease at any time and anticipates a move to a lower risk investment portfolio made up of long dated gilts (of appropriate nature and term) at cessation.
- For subsumption bodies, where a long term scheduled body has agreed to subsume the liabilities of an admission body or other employer at cessation, we have agreed with the Administering Authority to use the scheduled body discount rate for that employer. Details of employers to which this applies are given in Appendix 6.

An explanation of scheduled bodies, orphan bodies and subsumption bodies is given in the Glossary in Appendix 12.

Summary of method and assumptions

The Administering Authority agreed the assumptions used to calculate the past service liabilities and the cost of future benefit accrual. The table below summarises the key assumptions, together with those used for the previous valuation, and the reasons for any change. Further details of all of the assumptions are set out in Appendix 7.

Assumption	This valuation	Previous valuation	Rationale for change
Average in service discount rate	**5.6% pa**	**6.8% pa**	Updated to reflect the Administering Authority's attitude to risk and financial conditions at 31 March 2013.
Average left service discount rate	**5.5% pa**	**6.7% pa**	Updated to reflect the Administering Authority's attitude to risk and financial conditions at 31 March 2013.
RPI inflation	**3.3% pa**	**3.8% pa**	Updated to reflect outlook at 31 March 2013.
CPI inflation	**2.4% pa**	**3.3% pa**	Updated to reflect outlook at 31 March 2013.
Pensionable Pay increases	**3.4% pa**	**4.8% pa**	Updated to reflect outlook at 31 March 2013.
Post-retirement mortality assumption (normal health) – base table	SAPS Normal Health Light tables with scaling factors of: Men 110% Women: 90%	SAPS Normal Health Light tables with scaling factors of: Men 100% Women: 80%	Updated to reflect recent research and the Fund's pensioner mortality experience (including a postcode analysis) since the last valuation.
Post-retirement mortality assumption – future improvements	CMI 2012 core projections with long-term improvement rate of 1.5% pa	CMI 2009 core projections with long-term improvement rate of 1.25% pa	Updated to reflect recent research.

We show below the assumed life expectancies for current members resulting from these mortality assumptions:

Assumed life expectancy at age 65	Member currently aged 65		Member currently aged 45	
	This valuation	Previous valuation	This valuation	Previous valuation
Men	23.6	24.0	25.6	25.7
Women	26.5	26.8	28.8	28.8

We believe the assumptions set out in this section are appropriate for the purposes of the valuation, and for setting Employer contributions to the Fund.

As for the previous valuation, the past service liabilities have been calculated using the projected unit method. This method, with a one year control period, has also been used to calculate the cost of future benefits building up for most Employers. The attained age method has been used for some Employers who do not permit new employees to join the Fund.

The costs of providing the cash sum on death in service in the period since the previous valuation have been pooled across all Employers in the Fund. From 1 April 2013, the Administering Authority has agreed that the costs of providing all benefits on death in service and on ill health retirement from service will be pooled across all Employers.

Past service results

A comparison of the Fund's past service liabilities with the assets is shown below. The past service liabilities have been calculated using the assumptions described in the previous section.

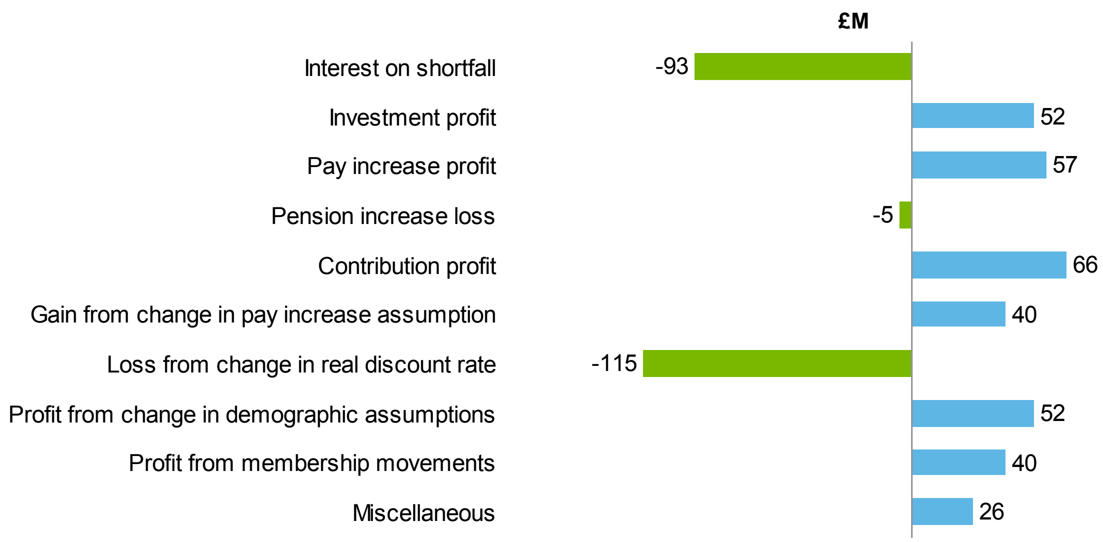
	£M
Value of past service benefits for	
Actives	681.0
Deferred members	237.9
Pensioners	760.8
Total past service liabilities	**1,679.7**
Value of assets	1,369.0
Past service surplus / (shortfall)	**(310.7)**
Funding ratio	**82%**

Employers will need to pay additional contributions to remove this shortfall. This is considered later.

Reasons for change in past service position

At the previous valuation, the Fund had a shortfall of £430.5M. The funding position has therefore improved by £119.8M over the period.

The chart below shows the key reasons for the change in funding position.



The analysis shows that the main factors affecting the funding position since the previous valuation have been:

- Investment returns on the Fund's assets above those previously assumed
- Pay increases below those previously assumed
- Payment of contributions to eliminate the shortfall
- Change in pay increase assumption relative to CPI
- Changes to demographic assumptions including mortality and ill health retirement

which have all improved the position; and

- Interest on the shortfall at the previous valuation
- A change in the real discount rate relative to CPI

which have worsened the position.

Addressing the shortfall

Employers will need to pay additional contributions to remove the shortfall.

We have agreed with the Administering Authority a recovery plan such that the shortfall will be removed by payment of additional contributions by the Employers over a range of different recovery periods not exceeding 25 years. The average recovery period is about 23 years.

The recovery period used for each Employer is set out in Appendix 6. For some Employers, contribution increases will be phased in over a number of years (or 'steps'). These are also shown in Appendix 6.

The assumptions used to calculate the recovery plans for each Employer are the same as those used to calculate the Employer's past service liabilities.

The aggregate contributions required to remove the shortfall by the end of 23 years from 1 April 2014 are £16.9M pa, increasing at 3.4% pa. This is equivalent to approximately 6.8% of Pensionable Pay assuming the membership remains broadly stable and pay increases in line with our assumptions from 1 April 2014.

Terminology

Recovery plan

A plan for making good any shortfall relative to the past service liabilities.

Recovery period

The period for which any contributions to remove the shortfall are to be paid.

Shortfall contributions

The additional contributions to remove the shortfall by the end of the recovery period.

Cost to the Employers of future benefits

The table below shows the calculated cost to Employers at the valuation date of benefits in the 2014 Scheme that members will earn in the Fund in future. This rate of Employer contribution would be appropriate if the Fund had no surplus or shortfall and the 2014 Scheme applied from 1 April 2013.

These rates have been calculated using the same assumptions as used to calculate the past service liabilities.

	% of Pensionable Pay
Value of benefits building up	21.2
Death in service cash sum	0.2
Administration expenses	0.3
Less member contributions	(6.3)
Net cost to the Employers	**15.4**

Employers will also pay additional contributions to remove the shortfall for past service liabilities.

The cost of future benefits has increased since the previous valuation and the main reason for this is:

- A reduction in the discount rate relative to CPI price inflation

which has increased the cost; this has been mitigated by

- The introduction of the 2014 Scheme
- Changes to the demographic assumptions, in particular the assumed rates of post retirement mortality and ill health retirement

which have both reduced the cost.

Low risk funding measure

The low risk measure shown below considers the position if no allowance is made in the discount rate for returns on the Fund assets to exceed the yields available on long dated UK government bonds as at 31 March 2013.

Comparing the low risk measure with the past service result provides an indication of the level of reliance of the valuation past service results on future assumed investment returns on the Fund's asset holdings which are uncertain, and may not be achieved. Details of the assumptions used to calculate this low risk measure are summarised in Appendix 8.

	£M
Value of past service benefits for	
Actives	1,178.9
Deferred members	396.9
Pensioners	998.2
Low risk value of liabilities	**2,574.0**
Value of assets	1,369.0
Low risk surplus / (shortfall)	**(1,205.0)**
Low risk funding ratio	**53%**

Risks and uncertainties

The Fund faces a number of key risks which could affect its funding position.

These risks include:

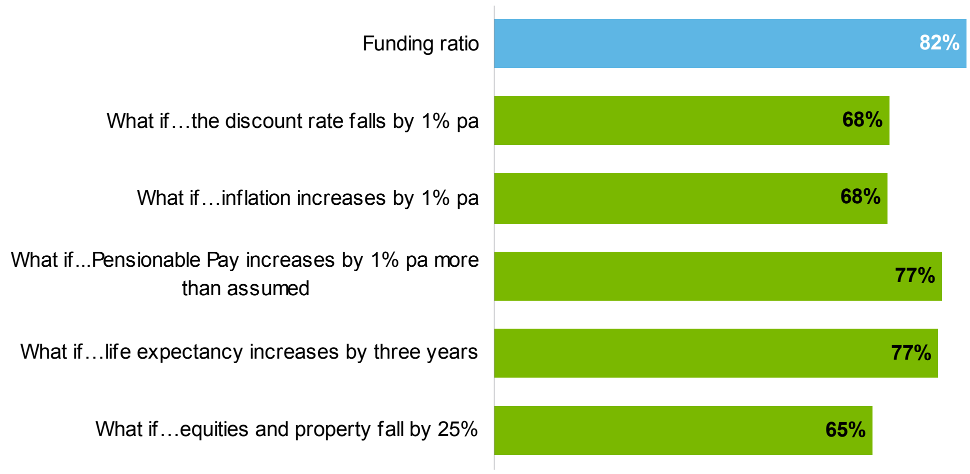
- Funding risk – the risk that the value placed on the past service liabilities is set too low and proves insufficient to meet the payments as they fall due.
- Employer risk – the risk that an Employer is no longer able to meet its liabilities in the Fund.
- Investment risks – the risk that investment returns are lower than allowed for in the valuation, and that investment returns and assets move out of line with the liabilities, so the funding position is not stable.
- Longevity risk – the risk that Fund members live for longer than assumed and that pensions would therefore need to be paid for longer resulting in a higher cost for the Fund.
- Inflation risk – the risk that inflation is higher than assumed, increasing the pensions that need to be paid.
- Options for members (or other parties) – the risk that members exercise options resulting in unanticipated extra costs. For example, members could swap less of their pension for cash than allowed for.

To quantify some of these risks, the chart on the following page shows the approximate impact of the following one-off step changes on the Fund's funding position (all other elements of the valuation being unchanged):

- A 1% pa fall in long term expected investment returns (the discount rate) with no change in asset values.
- A 1% pa increase in expected price inflation (measured by CPI).
- A 1% pa increase in expected Pensionable Pay increases.
- Life expectancy at age 65 is three years longer than anticipated (with corresponding increases at other ages).
- A 25% fall in the market value of equities (with no change in bond markets) and property.

Risks and uncertainties

The chart below shows the approximate impact on the funding ratio of the Fund under a number of different scenarios.



The analysis demonstrates that on the approach used the Fund is susceptible to:

- Falls in expected investment returns, or the market value of equities and property
- Rising inflation and pay increase expectations
- Members living longer than expected

The scenarios considered are not 'worst case' scenarios, and could occur in combination (rather than in isolation).

The low risk measure is also highly sensitive to these factors.

Individual Employer contribution rates

Employers, or groups of Employers, are set their own contribution rate which reflects their specific circumstances.

The Employer contribution rates are set by the Actuary taking into account a number of factors including:

- Administration Regulation 36 – which requires the Actuary to have regard to
  - The existing and prospective liabilities
  - The desirability of maintaining as nearly constant a common rate as possible and
  - The current version of the Administering Authority's funding strategy statement.
- The results of the valuation.
- Developments since the valuation date.
- Discussions between the Actuary, the Administering Authority and Employers.

Contribution rates for Employers which contribute to the Fund are set out in the Rates and Adjustments Certificate in Appendix 11.

Rates of contribution payable by individual Employers, or groups of Employers, differ because they take into account their particular membership profiles and funding ratios and, in some cases, the assumptions and recovery periods are specific to the Employer's circumstances. The Administering Authority has agreed that increases in contribution rates for some Employers will be phased in over periods not exceeding 3 years. Details are given in Appendix 6.

For certain Employers, the Administering Authority has agreed that shortfall contributions will be expressed as a percentage of Pensionable Pay. Where this is the case, rates are expressed in terms of projected Pensionable Pay figures which make allowance as far as practicable for anticipated changes in payroll for that Employer.

For Employers who are in surplus and where it is appropriate to an Employer's circumstances, it has been agreed with the Administering Authority that the surplus may be used to support the payment of contributions to the Fund at a rate below the future service contribution rate.

Terminology

Rates and Adjustments Certificate

Specifies the contributions payable by the Employers until March 2017.

The aggregate Employer contributions certified for the 3 years from 1 April 2014 can be summarised as follows:

Year from 1 April	% of Pensionable Pay	Aggregate shortfall contribution (£M)
2014	15.4	18.6
2015	15.4	18.5
2016	15.4	18.1

- The contributions payable by individual Employers are set out in Appendix 11.
- The annual shortfall contributions above are the aggregate of the expected shortfall contributions for individual Employers in each year.
- Any payments required to meet additional costs arising from early retirements and other increases in benefits are payable in addition.
- At the end of the period shown above, the annual shortfall contributions for each Employer or group of Employers are anticipated to increase by approximately 3.4% pa until the end of the relevant recovery period. Thereafter, contributions are anticipated to be in line with the future service contribution rate of 15.4% of Pensionable Pay. These contributions will be subject to review at future actuarial valuations.
- Member contributions are payable in addition to the Employer contributions set out above and in Appendix 11. These are set out in the Regulations. AVCs may be paid in addition.
- Contributions by active members and Employers should be paid to the Fund at such time and at such frequency as required by the Regulations. Any monetary shortfall contributions have been calculated on the basis that they are payable uniformly over the relevant year.

Final comments

The key results from this valuation are:

The Fund's assets were £1,369.0M and the past service liabilities were £1,679.7M which correspond to

- a shortfall of £310.7M and
- a funding ratio of 82%.

The cost of future benefits building up is 15.4% of Pensionable Pay after 1 April 2014.

If the shortfall is removed over 23 years from 1 April 2014, the aggregate Employer contributions needed would be equivalent to 22.2%* of Pensionable Pay until 31 March 2037, reverting to 15.4% of Pensionable Pay thereafter.

** if the membership remains broadly stable and pay increases in line with our assumptions from 2014.*

Developments since the valuation date

- **State Pension Age changes**

  The Chancellor has recently announced proposals for how State Pension Age will be linked to future changes in longevity, and indicated that these might result in State Pension Age increasing

  - To age 68 by the mid 2030s
  - To age 69 by the late 2040s.

  Normal Pension Age in the Fund is linked to State Pension Age so this will affect Normal Pension Age for benefits building up after 1 April 2014 for younger members in the Fund. As indicated earlier in this report no allowance has been made in this valuation for these possible further changes to State Pension Age.

  We estimate that anticipating these further possible changes in this valuation might reduce the future service contribution rate by about 0.2% of Pensionable Pay, if no other changes were made. In practice however we would expect this to be offset by the cost of improvements in members' longevity so the overall impact might be expected to be negligible.

- **Market movements since 31 March 2013**

  Since 31 March 2013, equity markets have generally risen, although this has been offset by falls in bond markets and in the risk-based discount rate that would be used for long term scheduled bodies. Therefore, overall, we believe that market movements since the valuation date have had little impact on the funding ratio.

Abolition of contracting-out

The Government is due to enact legislation in Spring 2014 to abolish contracting out from the State Second Pension from 6 April 2016. As a result the rebate in employee and employer National Insurance contributions will cease from that date.

At this stage there are no proposals to amend the Local Government Pension Scheme to mitigate these additional costs for employers and employees.

Monitoring the Fund

In light of the volatility inherent in situations where investments do not match liabilities, as for this Fund, we suggest the Administering Authority monitors the financial position in an appropriate manner on a quarterly basis.

Next actuarial valuation

The next formal actuarial valuation is due to take place as at 31 March 2016.

If actual experience before the next actuarial valuation is in line with the assumptions in this report, we expect the Fund's funding ratio to increase to about 84%. This is mainly due to continuing contributions to eliminate the shortfall.

Appendix 1: Legal framework

It is a legal requirement to carry out a full valuation at least once every three years.

This report was commissioned by and is produced solely for the use of the Administering Authority.

It is produced in compliance with:

- Regulation 36 of the Local Government Pension Scheme (Administration) Regulations 2008.
- The terms of the agreement between the Administering Authority and Aon Hewitt Limited, on the understanding that the report is solely for the benefit of the addressees.

Unless prior written consent has been given by Aon Hewitt Limited, this report should not be disclosed to or discussed with anyone else unless they have a statutory right to see it.

We permit the Administering Authority to release copies of this report to the following parties only:

- Any Employer which contributes to the Fund.
- The Department for Communities and Local Government.

We also permit the Department for Communities and Local Government to pass our report to the Government Actuary's Department in connection with their statutory duties. None of the above bodies have our permission to pass our report on to any other parties.

Notwithstanding such consent, Aon Hewitt Limited does not assume responsibility to anyone other than the addressees of this report.

Appendix 2: Membership data

Membership data was provided by the Administering Authority.

Active members		Number	Average age	Total pensionable pay (£000 pa)	Average pensionable pay (£ pa)	Average service (years)
Men	2013	4,347	45.4	101,088	23,255	12.8
	2010	*4,627*	*45.4*	*107,562*	*23,247*	*13.3*
Women	2013	8,899	44.8	142,280	15,988	7.9
	2010	*8,925*	*44.1*	*142,544*	*15,971*	*7.6*
Total	2013	13,246	45.0	243,368	18,373	9.5
	2010	*13,552*	*44.5*	*250,106*	*18,455*	*9.5*

Notes:

Pensionable Pay is over the year to the valuation date, and includes annualised pay for new entrants during the year. Actual part-time pay is included for part-timers.

In addition to the numbers above, there were 64 (2010: 53) Councillors accruing benefits in the Fund. Allowance has been made for these in our calculations.

Deferred members		Number	Average age	Total pension (£000 pa)	Average pension (£ pa)
Men	2013	3,451	44.1	6,799	1,970
	2010	*3,001*	*44.1*	*5,599*	*1,866*
Women	2013	7,238	44.1	8,664	1,197
	2010	*5,708*	*43.6*	*6,187*	*1,084*
Total	2013	10,689	44.1	15,463	1,447
	2010	*8,709*	*43.8*	*11,786*	*1,353*

Notes:

The deferred pension amounts shown above include increases up to and including April 2013 (2010: April 2010).

In addition to the numbers above there were 1,453 (2010: 1,608) members who had yet to decide whether to take transfer payments and 16 (2010: 5) Councillors entitled to deferred benefits. Suitable allowance has been made for these in our calculations.

Pensioners		**Number**	**Average age**	**Total pension (£000 pa)**	**Average pension (£ pa)**
Men	2013	3,793	70.0	30,861	8,136
	2010	*3,428*	*70.0*	*24,583*	*7,171*
Women	2013	4,306	70.2	16,059	3,730
	2010	*3,753*	*69.8*	*12,223*	*3,257*
Dependants	2013	1,447	74.0	4,021	2,779
	2010	1,406	74.1	3,563	2,534
Total	2013	9,546	70.7	50,941	5,336
	2010	*8,587*	*70.6*	*40,369*	*4,701*

Notes:

The pension amounts shown above include the increase awarded in April 2013 (2010: April 2010).

The 2013 figures include 61 children (2010: 50) who are in receipt of pensions. Suitable allowance has been made for these in our calculations.

In addition to the numbers above, there were 12 (2010: 1) former Councillors also receiving pensions from the Fund and suitable allowance has been made for these in our calculations.

Appendix 3: Membership data by Employer

The distribution of membership by Employer, as indicated by the data, is shown below.

Employer	Number of active members	Total Pensionable Pay	Number of deferred members	Number of pensioners and dependants
City and County of Cardiff	8,753	155,185	5,919	3,406
Vale of Glamorgan Council	2,816	48,585	2,139	1,196
Cowbridge Town Council	4	64	-	3
Llantwit Major Town Council	2	-	4	3
Penarth Town Council	12	223	6	6
Barry Town Council	13	258	7	8
Dinas Powys Community Council	1	-	-	4
Radyr & Morganstown Community Council	1	-	-	-
Cardiff Metropolitan University	606	15,197	498	250
Cardiff and Vale College	399	7,472	268	130
St David's 6th Form College	21	399	16	11
Stanwell School	67	814	20	13
Cardiff Bus Company	51	1,280	50	355
Public Services Ombudsman (Wales)	3	-	7	6
Civic Trust for Wales	1	-	-	1
Cardiff Gypsy And Traveller Project	1	-	2	2
Mirus-Wales	7	276	12	9
Cardiff Institute for the Blind	3	-	10	25
Wales & West Housing Association	1	-	1	10
Children in Wales	22	558	18	4
National Eisteddfod of Wales	11	435	11	5
Sport Wales	127	4,015	152	100
Cardiff University (UWC)	67	1,540	105	222
Wales Council For Voluntary Action	92	2,542	76	13
Cardiff Business Tec	3	-	3	5
Careers Wales	89	2,116	65	54

Employer	Number of active members	Total Pensionable Pay	Number of deferred members	Number of pensioners and dependants
Workers' Educational Association	31	779	9	2
Colleges Wales	7	306	3	4
Play Wales	8	241	5	4
Design Commission for Wales	3	-	1	1
One Voice Wales	3	-	-	-
Memorial Hall Theatre Trust	6	127	-	-
National Trust	15	208	-	-
South Glamorgan County Council	-	-	522	1,914
Cardiff City Council	-	-	382	1,180
Vale Of Glamorgan Borough Council	-	-	100	312
Probation Committee	-	-	5	29
Magistrates Court Committee	-	-	140	121
Cardiff Bay Development Corp	-	-	23	33
Catholic Children's Society (Wales)	-	-	-	1
Channel View Recreation Centre	-	-	-	1
Land Authority for Wales	-	-	16	24
Glamorgan & Gwent Housing Association	-	-	1	3
STAR Recreation Centre	-	-	-	2
Voluntary Action Cardiff (Intervol)	-	-	2	3
Vale Citizens Advice Bureau	-	-	8	7
Royal Welsh College of Music & Drama	-	-	33	19
CBAT (Arts & Regeneration)	-	-	2	2
Wales Youth Agency	-	-	1	4
Youth Link Wales	-	-	1	-
Mary The Immaculate GMS	-	-	1	4
Higher Education Development Wales	-	-	-	1
S E Wales Community Fund	-	-	-	1
Cardiff Old Library Trust	-	-	3	-
Sully Community Council	-	-	3	-
Pentyrch Community Council	-	-	1	-
Crime Reduction Initiatives	-	-	4	-
Citizens Advice (Cardiff)	-	-	11	5
Dimensions	-	-	2	-

Employer	Number of active members	Total Pensionable Pay	Number of deferred members	Number of pensioners and dependants
Glamorgan Holiday Hotel	-	-	4	12
Housing for Wales	-	-	17	16

Notes:

This summary excludes Councillors and members who had yet to decide whether to take transfer payments, but includes children in receipt of pensions.

Pensionable Pay is over the year to the valuation date, and includes annualised pay for new entrants during the year. Actual part-time pay is included for part-timers.

For Employers with three or fewer members, Pensionable Pay is not shown for data privacy reasons.

Appendix 4: Benefits

The benefits of the Local Government Pension Scheme are set out in Regulations, the principal Regulations currently being

- the Local Government Pension Scheme (Benefits, Membership and Contributions) Regulations 2007 (as subsequently amended) for membership before April 2014
- the Local Government Pension Scheme Regulations 2013 for membership from 1 April 2014

A broad summary of the benefits payable to active members as at 31 March 2014 is given below. This reflects our understanding of the Regulations at the time of writing. Readers should refer to the Regulations for further details.

	2008 Scheme	2014 Scheme
Type of scheme	Final salary	Career average revalued earnings (CARE)
Normal Retirement / Pension Age	65	Linked to State Pension Age (or age 65 if higher)
Member contributions	Between 5.5% of pay and 7.5% of full time equivalent Pensionable Pay dependent on contribution band the member is in Special provisions apply for certain categories of former manual workers.	Between 5.5% of pay and 12.5% of actual Pensionable Pay dependent on contribution band the member is in
50:50 option	Not applicable	Members can opt to pay 50% contributions for 50% of member's pension benefit (dependants' benefits not affected)
Pensionable Pay	Generally total pay (excluding non contractual overtime)	Generally total pay (including non contractual overtime)

	2008 Scheme	2014 Scheme
Final Pay	Generally Pensionable Pay over the 12 months prior to retirement or earlier exit or, if higher, in one of the preceding two years.	Not applicable
Pensionable service	Membership of Fund (years and days), plus periods of credited service	Not applicable
Normal retirement pension	1/60 of Final Pay for each year of Pensionable Service on or after 1 April 2008. For each year of Pensionable Service before 1 April 2008: ▪ a pension of 1/80 of Final Pay, plus ▪ a cash sum of 3/80 of Final Pay	1/49 of revalued Pensionable Pay received during membership from 1 April 2014. The resulting accumulated pension is called the 'pension account'.
Retirement cash sum	Pension can be surrendered for additional cash sum to a maximum cash sum of one quarter of the total capital value of benefits. Conversion rate is £12 for each £1 pa of pension given up.	Pension can be surrendered for cash sum to a maximum cash sum of one quarter of the total capital value of benefits. Conversion rate is £12 for each £1 pa of pension given up.

	2008 Scheme	2014 Scheme
Early retirement pension	Reduced pension payable on retirement after age 60, or after age 55 with Employer consent. Pension calculated as for normal retirement but based on Pensionable Service to early retirement date, and reduced for early payment. Certain categories of member eligible for protection can retire on unreduced pension if their age plus Pensionable Service is greater than or equal to 85 years, with Employer consent required if under age 60.	Reduced pension payable on retirement after age 55. Pension calculated as for normal retirement but based on revalued Pensionable Pay up to early retirement date, and reduced for early payment. Certain categories of member eligible for protection can retire on unreduced pension if their age plus Pensionable Service is greater than or equal to 85 years.
Incapacity and ill-health pensions	In each case members must be permanently incapable of efficiently discharging their current duties to qualify. **Tier 1** ▪ Payable to members with more than 3 months' Pensionable Service based on Final Pay at exit and potential Pensionable Service that would have been completed to Normal Retirement Age. ▪ To qualify for this benefit there must be no reasonable prospect of the member being capable of undertaking any gainful employment.	In each case members must ▪ be permanently incapable of efficiently discharging the duties of the employment they were engaged in to qualify and ▪ be incapable of immediately undertaking any gainful employment **Tier 1** ▪ Payable to members with more than 2 years Pensionable Service. ▪ Immediate payment of accrued pension, plus an enhancement equal to the amount of earned pension the member would have accrued between the date of leaving and Normal Pension Age, based on the current Pensionable Pay. ▪ To qualify for this benefit the member must be unlikely to be capable of undertaking any gainful employment before Normal Pension Age.

	2008 Scheme	2014 Scheme
Incapacity and ill-health pensions (continued)	**Tier 2** ▪ Payable to members with more than 3 months' service based on Final Pay at exit and Pensionable Service completed to date of exit plus 25% of the period from date of exit to Normal Retirement Age. ▪ To qualify for this benefit the member must be expected to be capable of undertaking gainful employment at some point after 3 years, but before normal retirement age.	**Tier 2** ▪ Payable to members with more than 2 years Pensionable Service. ▪ Immediate payment of accrued pension, plus an enhancement equal to 25% of the Tier 1 enhancement. ▪ To qualify for this benefit the member must be expected to be capable of undertaking gainful employment at some point after 3 years, but before Normal Pension Age.
	Tier 3 ▪ Payable to members with more than 3 months' Pensionable Service based on Final Pay at exit and Pensionable Service completed to date of exit. ▪ To qualify for this benefit the member must be expected to be capable of undertaking gainful employment at some point within 3 years of date of exit. ▪ Payable for 3 years or until gainful employment obtained, if earlier.	**Tier 3** As 2008 Scheme, but subject to members having qualifying service of 2 years or more.

	2008 Scheme	2014 Scheme
Leaving Pensionable Service	Pension payable on retirement at Normal Retirement Age based on Final Pay at exit and Pensionable Service to date of exit. Certain categories of member can retire early on unreduced pension if aged 60 or over and their age plus service is greater than or equal to 85 years. Service in this case includes the period between date of exit and commencement of pension.	Pension payable on retirement at Normal Pension Age calculated as for normal retirement based on revalued Pensionable Pay during period of membership.
CARE revaluation in service	Not applicable	In line with increases in the Consumer Prices Index (CPI)
Deferred pension revaluation after leaving	▪ Guaranteed Minimum Pensions (GMPs) increase in deferment in line with State revaluation factors. ▪ Deferred pensions in excess of GMPs increase in line with CPI	In line with CPI
Pension increases in payment	▪ GMPs accrued after 6 April 1988 increase at the lower of 3% pa and CPI ▪ Pensions in payment in excess of GMPs increase in line with CPI	In line with CPI

	2008 Scheme	2014 Scheme
Death benefits	▪ A cash sum of 3 x Final Pay at exit. ▪ A partner’s pension of 1/160 of Final Pay at exit for each year of Pensionable Service, including a service enhancement that would have applied had retirement due to ill-health under Tier 1 occurred at the date of death. Partners are spouses, civil partners and co habitees. ▪ Children's pensions may be payable.	▪ A cash sum of 3 x Pensionable Pay at exit. ▪ A partner’s pension of 1/160 of revalued Pensionable Pay received during membership to date of death plus an enhancement to pension of 1/160 of Pensionable Pay at death for each year between death and Normal Pension Age. Partners are spouses, civil partners and co-habitees. ▪ Children's pensions may be payable.
State pension scheme	The Scheme is contracted out of the State Second Pension Scheme.	The Scheme is contracted out of the State Second Pension Scheme. Note that the Government proposes abolishing contracting out from April 2016.
Protections /underpins	Pre 2008 benefits protected. Rule of 85 retained for members aged over 60 on 31 March 2016. Partial protection of Rule of 85 for members aged over 60 on 31 March 2020.	Pre 2014 benefits protected (including link to eventual Final Pay). Underpin of benefits on 2008 Scheme structure for members aged over 55 in April 2012. Rule of 85 protections where applicable will continue to apply in the 2014 Scheme.
Vesting period	A refund of member contributions is paid for members leaving membership with qualifying service of less than 3 months.	A refund of member contributions is paid for members leaving membership with qualifying service of less than 2 years.

Appendix 5: Consolidated revenue account

We show a summary of the revenue and outgo of the Fund since the previous valuation below.

		Total £000s
Fund as at 31 March 2010		**1,032,716**
Income		
Contributions	Employer normal	162,196
	Employer additional	8,454
	Employer special	-
	Employee	46,934
Transfers-in		9,154
Investment income		44,433
Other income		8,618
Total income		**279,789**
Outgo		
Pensions paid		138,476
Retirement cash sums		42,155
Transfers-out		13,289
Refunds of contributions on leaving		11
Expenses	Investment	10,345
	Administration	2,386
Total outgo		**206,662**
Change in market value		**244,121**
Fund as at 31 March 2013		**1,349,964**

Note: The market value of assets as at 31 March 2010 was restated in 2010/11 to reflect accrual of pension strain costs. The opening value above is the restated value.

Appendix 6: Employer funding strategies

An Employer's funding strategy depends on its own circumstances. Key details for each Employer are set out below. See the sections on Funding Objective and the Glossary in Appendix 12 for more details.

Employer	Recovery period	Stepping period (if any)	Subsuming Employer (if any)
Scheduled and subsumption bodies			
City and County of Cardiff	23.5	-	-
Vale of Glamorgan Council	25	-	-
Cowbridge Town Council	20	-	-
Llantwit Major Town Council	20	-	-
Penarth Town Council	20	-	-
Barry Town Council	20	-	-
Dinas Powys Community Council	20	-	-
Radyr & Morganstown Community Council	20	-	-
Cardiff Metropolitan University	20	-	-
Cardiff and Vale College	20	-	-
St David's 6th Form College	20	-	-
Stanwell School	20	-	-
Cardiff Bus Company	6	-	City and County of Cardiff
Memorial Hall Theatre Trust	-	-	Barry Town Council
National Trust	-	-	Vale of Glamorgan Council

Employer	Recovery period	Stepping period (if any)	Subsuming Employer (if any)
Orphan bodies			
Public Services Ombudsman (Wales)	-	-	-
Civic Trust For Wales	20	3	-
Cardiff Gypsy And Traveller Project	20	3	-
Mirus-Wales	20	-	-
Children in Wales	20	3	-
Cardiff Institute for the Blind	20	-	-
Wales & West Housing Association	20	-	-
National Eisteddfod of Wales	20	-	-
Sport Wales	25	3	-
Cardiff University (UWC)	12	-	-
Wales Council For Voluntary Action	20	-	-
Cardiff Business Tec	-	-	-
Careers Wales	-	-	-
Workers' Educational Association	20	-	-
Colleges Wales	20	-	-
Play Wales	20	3	-
Design Commission for Wales	-	-	-
One Voice Wales	20	3	-

Appendix 7: Assumptions used to value the liabilities

The assumptions used for calculating the past service liabilities and the cost of future service benefit accrual are summarised below. Different assumptions are used for the low risk measure, as set out in Appendix 8.

Financial assumptions

In service discount rate	5.6% pa
Scheduled bodies	5.6% pa
Orphan bodies	5.2% pa
Left service discount rate	5.5% pa
Scheduled bodies	5.6% pa
Orphan bodies	3.9% pa
Rate of Pensionable Pay increases (service up to 31 March 2014) (in addition to promotional increases)	3.4% pa
Rate of RPI price inflation	3.3% pa
Rate of CPI price inflation	2.4% pa
Rate of revaluation of pension accounts	2.4% pa
Rate of pension increases	
on non GMPs	2.4% pa
on post 88 GMPs	2.0% pa
Rate of deferred pension increases	
on non GMPs	2.4% pa
on GMPs	3.4% pa
Administration expenses	0.3% of Pensionable Pay

Demographic assumptions

Pre-retirement base mortality	Males: 65% of Standard SAPS Normal Health Light tables Females: 65% of Standard SAPS Normal Health Light tables
Post-retirement base mortality	Males: 110% of Standard SAPS Normal Health Light tables Females: 90% of Standard SAPS Normal Health Light tables
Ill heath retirement base mortality	Males: 90% of Standard SAPS Ill health tables Females: 90% of Standard SAPS Ill health tables
Improvements to base mortality	An allowance for improvements between 2002 and 2013 and an allowance for future improvements have been made in line with the CMI 2012 Core Projections assuming a long-term annual rate of improvement in mortality rates of 1.5% pa for men and women.
Promotional salary increases	Allowance has been made for age-related promotional increases (see sample rates below).
Withdrawals	Allowance has been made for withdrawals from service (see sample rates below). On withdrawal, members are assumed to leave a deferred pension in the Fund.
Retirement age	Members were assumed to retire at the following ages:

Member group	Assumed age at retirement
Active members with protected Rule of 85 age (joined LGPS before 1 October 2006 and attained age 60 before 1 April 2020)	Rule of 85 age (or age 60 if higher). Any part of their pension payable from a later age will be reduced.
All other active members	Age 65. Post 2014 pensions will be reduced if the member's State Pension Age is projected to be over age 65 at that point.
Deferred members who left the Fund before 1 April 2013 with protected Rule of 85 age	Rule of 85 age (or age 60 if higher). Any part of their pension payable from a later age will be reduced.
Deferred members who left the Fund before 1 April 2013 with no protected Rule of 85 age	Age 65.

Retirement cash sum	Each member was assumed to surrender pension on retirement, such that the total cash received (including any accrued lump sum from pre 2008 service) is 75% of the permitted maximum.
Family details	A man was assumed to be three years older than his wife/partner. 90% of non-pensioners were assumed to be married or have a spouse, civil partner or co-habitee ('partner') at retirement or earlier death. 90% of pensioners were assumed to be married or have a partner at age 65 or younger. Partners were assumed to exhibit the same mortality as pensioners of the same sex who retired in normal health.

	No allowance for children's pensions.
Retirement due to ill health	Allowance has been made for retirements due to ill health (see below). Proportions assumed to fall into the different benefit tiers are: Tier 1 80% Tier 2 10% Tier 3 10%
Take up of 50:50 Scheme	An allowance consistent with that used by the Government Actuary's Department in the costing of the 2014 Local Government Pension Scheme based on an assumption of 10% of members earning less than £21,000 electing to join the 50:50 scheme.

Sample rates

The table below illustrates the allowances made for withdrawals from service and ill health retirement at various ages. Also shown is the allowance included for promotional pay increases, which is shown as the percentage increase over the next year.

Current age	Percentage promotional pay increase over year	Percentage leaving the Fund each year as a result of withdrawal from service	Percentage leaving the Fund each year as a result of ill health early retirement
20	4.6	15.0	0.005
25	3.6	12.5	0.042
30	1.2	9.9	0.078
35	1.4	7.6	0.141
40	0.0	5.3	0.204
45	0.0	3.5	0.321
50	0.0	1.8	0.437
55	0.0	0.0	0.902
60	0.0	0.0	1.366

Appendix 8: Assumptions for low risk measure

The low risk measure considers the position if no allowance is made in the discount rate for returns on the Fund assets to exceed the yields available on long dated UK government bonds as at 31 March 2013, as shown below.

All other assumptions are the same as shown in Appendix 7.

Financial Assumptions

In service discount rate	3.2% pa
Left service discount rate	3.2% pa

Appendix 9: Membership experience

We have compared the actual numbers of deaths, retirements and other exits since the previous valuation with the numbers expected on the assumptions used for the current valuation:

Type of exit	Men	Women
Death in service		
Actual	16	20
Expected	16	21
Withdrawals (excluding refunds)		
Actual	811	2,099
Expected	591	1,217
Normal and voluntary retirements		
Actual	294	399
Expected	504	582
Ill-health retirements		
Actual	38	39
Expected	65	105
Severance and redundancy retirements		
Actual	253	247
Expected	0	0

Appendix 10: Current contribution rates

Employers have paid contributions at the following levels in the year ended 31 March 2014.

Employer	% of Pensionable Pay	Additional monetary amount £
Scheduled bodies		
City and County of Cardiff	23.9%	-
Vale of Glamorgan Council	21.5%	-
Cowbridge Town Council	28.9%	-
Llantwit Major Town Council	28.9%	-
Penarth Town Council	28.9%	-
Barry Town Council	28.9%	-
Dinas Powys Community Council	18.2%	1,400
Radyr and Morganstown Community Council	18.2%	700
Cardiff Metropolitan University	13.0%	952,500
Cardiff and Vale College	13.0%	341,500
St David's 6th Form College	15.8%	17,300
Stanwell School	15.8%	30,300
Cardiff Bus Company	22.3%	521,000
Public Services Ombudsman (Wales)	30.3%	242,400
Admission bodies		
Civic Trust for Wales	24.0%	-
Cardiff Gypsy and Traveller Project	24.0%	-
Mirus-Wales	24.0%	-
Children in Wales	22.2%	-
Cardiff Institute for the Blind	22.7%	62,800
Wales and West Housing Association	22.7%	83,500
National Eisteddfod of Wales	25.3%	50,000
Sport Wales	21.5%	75,000
Cardiff University (UWC)	25.7%	1,391,000
Wales Council for Voluntary Action	22.6%	125,000
Cardiff Business Tec	29.2%	8,200

Employer	% of Pensionable Pay	Additional monetary amount £
Careers Wales	18.1%	-
Workers' Educational Association	22.6%	-
Colleges Wales	25.9%	17,800
Play Wales	23.5%	-
Design Commission for Wales	22.2%	-
One Voice Wales	20.0%	-
Welsh Council for Voluntary Action	22.6%	125,000
Memorial Hall Theatre Trust	20.5%	-
National Trust	20.7%	-

Appendix 11: Rates and Adjustments Certificate

Actuarial certificate given for the purposes of Regulation 36 of the Local Government Pension Scheme (Administration) Regulations 2008

In accordance with Regulation 36 of the Local Government Pension Scheme (Administration) Regulations 2008 (the 'Administration Regulations'), we certify that contributions should be paid by Employers at the following rates for the period 1 April 2014 to 31 March 2017.

- A common rate of 15.4% of Pensionable Pay.
- Individual adjustments which, when added to or subtracted from the common rate, produce the following minimum Employer contribution rates

Employer	Contribution rate 1 April 2014 to 31 March 2017 % of Pensionable Pay	Additional monetary amount Year commencing 1 April		
		2014 £	2015 £	2016 £
Scheduled bodies				
City and County of Cardiff	22.9%	-	-	-
Vale of Glamorgan Council	22.7%	-	-	-
Cowbridge Town Council	27.0%	-	-	-
Llantwit Major Town Council	27.0%	-	-	-
Penarth Town Council	27.0%	-	-	-
Barry Town Council	27.0%	-	-	-
Dinas Powys Community Council	27.0%	-	-	-
Radyr and Morganstown Community Council	27.0%	-	-	-
Cardiff Metropolitan University	13.6%	527,300	527,300	527,300
Cardiff and Vale College	13.6%	259,300	259,300	259,300
St David's 6th Form College	13.6%	13,800	13,800	13,800
Stanwell School	16.4%	13,300	13,300	13,300
Cardiff Bus Company	25.4%	480,000	480,000	480,000
Public Services Ombudsman (Wales)	32.3%	254,000	266,000	279,000
Admission bodies				
Civic Trust For Wales	23.4%	3,900	7,600	11,300
Cardiff Gypsy And Traveller Project	23.4%	3,400	6,700	9,900
Mirus-Wales	23.4%	-	-	-
Cardiff Institute for the Blind	20.6%	56,800	58,700	60,700

Employer	Contribution rate 1 April 2014 to 31 March 2017 % of Pensionable Pay	Additional monetary amount Year commencing 1 April		
		2014 £	2015 £	2016 £
Wales & West Housing Association	20.6%	101,600	105,100	108,700
National Eisteddfod of Wales	25.5%	32,000	32,000	32,000
Sport Wales	20.2%	250,000	460,000	670,000
Cardiff University (UWC)	27.3%	1,300,000	1,300,000	1,300,000
Wales Council For Voluntary Action	21.4%	34,000	34,000	34,000
Cardiff Business Tec	28.7%	-	-	-
Careers Wales	18.1%	-	-	-
Workers Educational Association	22.3%	5,400	5,600	5,800
Colleges Wales	19.8%	9,000	9,000	9,000
Play Wales	24.0%	3,500	8,400	13,200
Design Commission for Wales	20.3%	-	-	-
One Voice Wales	19.4%	3,000	6,000	9,000
Memorial Hall Theatre Trust	17.8%	-	-	-
National Trust	20.7%	-	-	-

Employer	Contribution rate Year commencing 1 April		
	2014 % of Pensionable Pay	2015 % of Pensionable Pay	2016 % of Pensionable Pay
Children in Wales	24.7%	27.3%	29.9%

The contributions shown above represent the minimum contributions to be paid by each Employer. Employers may choose to pay additional contributions from time to time subject to the Administering Authority's agreement.

Where payments due from an Employer are expressed as monetary amounts, the amounts payable by that Employer may be adjusted to take account of any amounts payable, in respect of a surplus or shortfall to which those monetary payments relate, by new employers created after the valuation date which have been credited with proportions of the assets and liabilities of the relevant Employer. Any adjustment should be as advised by the Fund Actuary.

Additional contributions may be required in respect of any additional liabilities that arise under the provisions of Regulations 30, 31, 35 and 38 of the 2013 Regulations and Employers will be notified of such contributions separately by the Administering Authority.

Additional contributions may be payable by any Employers which have ceased to participate in the Fund since 31 March 2013 and these will be certified separately.

Contribution rates for Employers commencing participation in the Fund after 31 March 2013 will be advised separately.

This certificate should be read in conjunction with the notes overleaf.

Signed on behalf of Aon Hewitt Limited

Christine Rice FIA	Scott Campbell FIA
Fellow of the Institute and Faculty of Actuaries	Fellow of the Institute and Faculty of Actuaries

28 March 2014

Aon Hewitt Limited
25 Marsh Street
Bristol
BS1 4AQ

Notes to Actuary's certificate

The contribution rates certified have been assessed using the actuarial methods and assumptions detailed in our report dated 28 March 2014.

These assumptions imply the following levels of new retirement liabilities from active membership status:

Type of Retirement	Anticipated retirements over 4 year period from 1 April 2013 to 31 March 2017	
	Number	New Pension £'000
Normal, late and voluntary under Regulations 30(1), 30(3) and 30(5) of the 2013 Regulations or Regulation 16 or 30 of the Benefits Regulations	1,448	11,886
Comments on Funding	Such retirements are generally 'cost neutral'. Additional funding would not normally be required if actual retirements exceed the number anticipated, unless retirements occur before Normal Pension Age and no reduction for early payment applies. The Administering Authority requires separate funding of any additional liabilities arising from such retirements and, as such, the financial impact of these retirements is neutral.	
Ill-health under Regulation 35 of the 2013 Regulations or Regulation 20 of the Benefits Regulations	244	1,657
Comments on Funding	Such retirements increase costs due to the early payment of enhanced benefits. If actual retirements exceed the number anticipated, and no action is taken before the next valuation, this would be identified as a source of loss at the next valuation. In accordance with Regulation 64(6)(b) of the 2013 Regulations the Administering Authority should monitor the number of ill-health retirements arising over each Fund year and refer the position to the Actuary if numbers exceed the levels implied above.	

Type of Retirement	Anticipated retirements over 4 year period from 1 April 2013 to 31 March 2017	
	Number	**New Pension £'000**
Severance and redundancy under Regulation 30(7) of the 2013 Regulations or Regulation 19 of the Benefits Regulations	Nil	Nil
Comments on Funding	Such retirements increase costs due to the early payment of benefits. Any enhancement of benefits through the Fund would increase costs further. If actual retirements exceed the number anticipated, and no action is taken before the next valuation, this would be identified as a source of loss at the next valuation. The Administering Authority requires separate funding of liabilities arising from such retirements and, as such, the financial impact of these retirements is neutral.	
Flexible retirement under Regulation 30(6) of the 2013 Regulations or Regulation 18 of the Benefits Regulations	Nil	Nil
Comments on Funding	Such retirements are generally 'cost neutral'. Additional funding would not normally be required if actual retirements exceed the number anticipated, unless retirements occur before Normal Pension Age and no reduction for early payment applies. The Administering Authority requires separate funding of any additional liabilities arising from such retirements and, as such, the financial impact of these retirements is neutral.	

In this certificate references to

- the 2013 Regulations mean the Local Government Pension Scheme Regulations 2013
- the Benefits Regulations mean the Local Government Pension Scheme (Benefits, Membership, and Contributions) Regulations 2007
- the Administration Regulations mean the Local Government Pension Scheme (Administration) Regulations 2008

Appendix 12: Glossary

Active member

A person who is employed by an employer participating in the Fund, and is paying (or is treated as paying) contributions to the Fund (includes certain members temporarily absent, eg due to family leave or sickness).

Admission body

An Employer admitted to the Fund under an admission agreement.

Attained age method

This is one of the methods used by actuaries to calculate a contribution rate to the Fund. This method calculates the present value of the benefits expected to build up over members' expected remaining membership of the Fund expressed as a percentage of their expected future pensionable pay. It allows for projected future increases to pension accounts through to retirement or date of leaving service. The method is based on the current membership and takes no account of the possibility of further members joining the Fund. If there are no new members, this method would be expected to result in a stable contribution rate as a percentage of pay, once surpluses or shortfalls are taken into account, and if all the other assumptions are borne out. However, if more members join the Fund to replace older leavers, the contribution rate can be expected to fall.

Best estimate

Best estimate assumptions are such that the eventual outcome is considered equally likely to be higher or lower than the best estimate.

Consumer Prices Index (CPI)

This is the price inflation index that increases to pensions and deferred pensions paid by the Fund are based on. It is published every month by the Office of National Statistics.

Deferred member

A former employee who has left active membership, but has not yet received any benefits from the Fund and is prospectively entitled to receive a deferred pension from his/her Normal Pension Age.

Discount rate

This is used to place a present value on a future payment. A 'low risk' discount rate is usually derived from the investment return achievable by investing in UK government bonds. A discount rate higher than the 'low risk' rate is often used to allow for some of the extra investment return that is expected by investing in assets other than UK government bonds.

Funding objective

To hold sufficient and appropriate assets to cover the funding target.

Funding ratio

This is the ratio of the value of assets to the funding target.

Funding strategy statement

A document prepared by the Administering Authority in accordance with the Administration Regulations which sets out the funding strategy adopted for the Fund. The Actuary must have regard to this statement in preparing this actuarial valuation.

Funding target

An assessment of the present value of the benefits that will be paid from the Fund in the future, normally based on pensionable service prior to the valuation date. Under the current Funding Strategy Statement the funding target is equal to the past service liabilities calculated on a prudent set of assumptions.

Future service contribution rate

The contribution rate (expressed as a percentage of Pensionable Pay) required to meet the cost of benefits which will accrue to members in future.

Guaranteed Minimum Pensions (GMPs)

Most Funds that were contracted out of the State Earnings Related Pension Scheme (SERPS) before April 1997 have to provide a pension for service before that date at least equal to the Guaranteed Minimum Pension (GMP). This is approximately equal to the SERPS pension that the member would have earned had the Fund not been contracted out. GMPs ceased to accrue on 6 April 1997 when the legislation changed.

Orphan body

This is an admission body or other employer whose participation in the Fund may cease at some future point in time, after which it is expected that the Administering Authority will have no access to future contributions from that employer in respect of the employer's liabilities in the Fund once any liability on cessation has been paid.

Past service liabilities

This is the present value of the benefits to which members are entitled based on pensionable service to the valuation date, assessed using the assumptions agreed between a Fund's Administering Authority and the Actuary. It generally allows for projected future increases to pay through to retirement or date of leaving service.

Present value

Actuarial valuations involve projections of pay, pensions and other benefits into the future. To express the value of the projected benefits in terms of a cash amount at the valuation date, the projected amounts are discounted back to the valuation date by a discount rate. This value is known as the present value. For example, if the discount rate was 6 a year and if we had to pay a cash sum of £1,060 in one year's time the present value would be £1,000.

Projected unit method

One of the common methods used by actuaries to calculate a contribution rate to a Fund.

This method calculates the present value of the benefits expected to accrue to members over a control period (often one year) following the valuation date. The present value is usually expressed as a percentage of the members' pensionable pay. It allows for projected future increases to benefits through to retirement or date of leaving service. Provided that the distribution of members remains stable with new members joining to take the place of older leavers, the contribution rate calculated can be expected to remain stable, if all the other assumptions are borne out. If there are no new members however, the average age will increase and the contribution rate can be expected to rise.

Prudent

Prudent assumptions are such that the eventual outcome is considered more likely to overstate than understate the amount of money actually required to meet the cost of the benefits.

Rates and Adjustments Certificate

A certificate required at each actuarial valuation under the Regulations, setting out the contributions payable by employers for the 3 years from the 1 April following the valuation date.

Recovery period

The period over which any surplus or shortfall is to be eliminated.

Recovery plan

Where a valuation shows a funding shortfall against the past service liabilities, a recovery plan sets out how the Administering Authority intends to meet the funding objective.

Regulations

The statutory regulations setting out the contributions payable to, and the benefits payable from, the Local Government Pension Scheme and how the Funds are to be administered. They currently include the following sets of regulations:

- 1997 Regulations — Local Government Pension Scheme Regulations 1997
- Administration Regulations — Local Government Pension Scheme (Administration) Regulations 2008
- Benefits Regulations — Local Government Pension Scheme (Benefits, Membership, and Contributions) Regulations 2007
- Transitional Regulations — Local Government Pension Scheme (Transitional provisions) 1997

From April 2014 the following will set be the key sets of regulations defining the new 2014 Scheme:

- 2013 Regulations — Local Government Pension Scheme Regulations 2013
- 2014 Transitional Regulations — Local Government Pension Scheme (Transitional Provisions, Savings and Amendment) Regulations 2014

Scheduled body

Employers which participate in the Fund under Schedule 2 of the Administration Regulations.

Shortfall

Where the assets are less than the Funding Target, this is the Funding Target less the value of assets.

Shortfall contributions

Additional contributions payable by employers to remove the shortfall by the end of the recovery period.

State Pension Age (SPA)

Age at which State pensions are payable. Current legislation specifies the following ages:

- Currently age 65 for men; transitioning to age 65 for women by 2018.
- Current legislation transitions State Pension Age for both men and women to age 68 by 2046, as follows:
  - to age 66 by 2020
  - to age 67 by 2036
  - to age 68 by 2046

Legislation to bring forward the increase to age 67 to 2028 is expected to be enacted in Spring 2014.

The Government has announced further proposed changes to link changes in State Pension Age to improvements in longevity.

Subsumption and subsumption body

When an admission body or other employer ceases participation in the Fund, so that it has no employees contributing to the Fund, and once any contribution on cessation as required by the regulations has been paid, the Fund will normally be unable to obtain further contributions from that employer (eg if future investment returns are less than assumed). It is however possible for another long term employer in the Fund (generally a scheduled body) to agree to be a source of future funding should any funding shortfalls emerge on the original employer's liabilities. The long term employer effectively subsumes the assets and liabilities of the ceasing employer into its own assets and liabilities.

In this document this is known as subsumption. In this document the admission body or other employer being subsumed is referred to as a subsumption body and its liabilities are known as subsumed liabilities.

Strains

These represent the value of additional benefits granted to members under a discretion of the employer or the Administering Authority. They include the cost of providing enhanced benefits on retirement or redundancy. The Regulations require the Employer to make additional payments to the Fund in respect of certain strain costs.

Surplus

Where the assets are more than the Funding Target, this is the value of assets less the Funding Target.

Transfer value

Members generally have a legal right to transfer their benefits to another pension arrangement before they retire. In taking a transfer, members give up their benefits in a Fund, and a sum of money (called the transfer value) is paid into another approved pension Fund; this is used to provide pension benefits on the terms offered in that Fund.