

HEALTH WEALTH CAREER



# ACTUARIAL VALUATION REPORT

WORCESTERSHIRE  
COUNTY COUNCIL  
PENSION FUND

AS AT 31 MARCH 2016

## CONTENTS

1. <b>Introduction</b>	<b>1</b>
2. <b>Funding Strategy – Key Elements</b>	<b>2</b>
3. <b>Key results of the funding assessment</b>	<b>3</b>
• Solvency funding position	3
• Primary contribution rate	4
• Correcting the shortfall – secondary contribution rate	4
4. <b>Experience since last valuation</b>	<b>5</b>
• Summary of key inter-valuation experience	5
• Reasons for the change in funding position since the last actuarial valuation	6
5. <b>Cash flows, risks and alternative funding positions</b>	<b>7</b>
• Benefit cash flows	7
• Projected funding position at next actuarial valuation	8
• Material risks faced by the Fund	8
• Sensitivity of funding position to changes in key assumptions	8
• Minimum risk funding position	9

## APPENDICES

A. Assumptions	11
• How the benefits are valued	11
• Financial assumptions used to calculate the solvency funding target	12
• Demographic assumptions used	12
• Assumptions used to calculate the primary contribution rate	16
B. Summary membership data	17
C. Assets	18
D. Scheme benefits	19
E. Summary of income and expenditure	20
F. Analysis of membership experience	21
G. Rates and adjustments certificate issued in accordance with Regulation 62	22
• Primary contribution rate	22
• Secondary contribution rate	22
• Contribution amounts payable	22
• Further adjustments	22
• Regulation 62(8)	23
H. Schedule to the rates and adjustments certificate dated 31 March 2017	24
I. Glossary	37

## 1

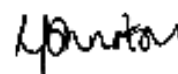
## INTRODUCTION

This report is addressed to the Administering Authority of the Worcestershire County Council Pension Fund (“the Administering Authority”) and is provided to meet the requirements of Regulation 62 of the Local Government Scheme Regulations 2013 (as amended) (“the Regulations”). It describes the factors considered by the Administering Authority when carrying out the actuarial valuation as at 31 March 2016 and the decisions reached as a result.

The purpose of the actuarial valuation is for the Administering Authority to determine:

- The expected cost of providing the benefits built up by members at the valuation date (the “liabilities”), and compare this against the funds held by the Fund (the “assets”).
- The contributions needed to cover the cost of the benefits that active members will build up in the future and other costs incurred in running the Fund (the ‘Primary Contribution Rate’).
- An appropriate plan for making up the shortfall if the Fund has less assets than liabilities. This plan will cover the amounts which will need to be paid (the ‘Secondary Contribution Rate’) and the timeframe over which they will be paid (‘the Recovery Period’).

SIGNATURE

NAME

Ian Kirk

Leanne Johnston

QUALIFICATION

Fellow of the Institute and  
Faculty of ActuariesFellow of the Institute and  
Faculty of Actuaries

DATE

31 March 2017


**This report uses various technical terms. These are explained in more detail in the explanatory boxes which appear throughout this report, and in the Glossary at Appendix I.**

This report has been prepared in accordance with the version of the *Pensions Technical Actuarial Standard* current at the date this report is signed. It also complies with the relevant requirements of *Technical Actuarial Standards R: Reporting Actuarial Information, D: Data and M: Modelling*, where they apply to this report. These Standards are all issued by the Financial Reporting Council. The calculations referred to in the report use methods and assumptions appropriate for reviewing the financial position of the Fund and determining a contribution rate for the future. Mercer does not accept liability to any third party in respect of this report; nor do we accept liability to the Administering Authority if the information provided in this report is used for any purpose other than that stated. The report may be disclosed to members and others who have a statutory right to see it. It may also be disclosed to any participating employer and, if the Administering Authority and Mercer consent, it may be disclosed to other third parties.

## 2

## FUNDING STRATEGY – KEY ELEMENTS

Fundamental to the valuation results is the funding strategy adopted by the Fund. This funding strategy is set out in a specific document (the Funding Strategy Statement or FSS for short) which is one of the Administering Authority's key governance documents for the Fund. In essence, the FSS sets out an overview of the approach to be used for the actuarial valuation. Amongst other things it outlines the assumptions, both economic and demographic, to be used in calculating the value of the liabilities built up and the contributions required to correct any funding shortfall, and the contribution rate required to fund the benefits for future service. It also sets out the strategy for making good any funding shortfall, in particular how any shortfall is expected to be financed in terms of the balance between future contributions and future investment returns, and the period over which any shortfall is expected to be recovered.



The FSS is the Administering Authority's key governance document in relation to the actuarial valuation. It sets out the funding policies adopted, the actuarial assumptions used, and the timescales over which deficits will be paid off. Employers are consulted about the FSS as part of the actuarial valuation process.

The principal elements of the funding strategy adopted for this actuarial valuation are as follows:

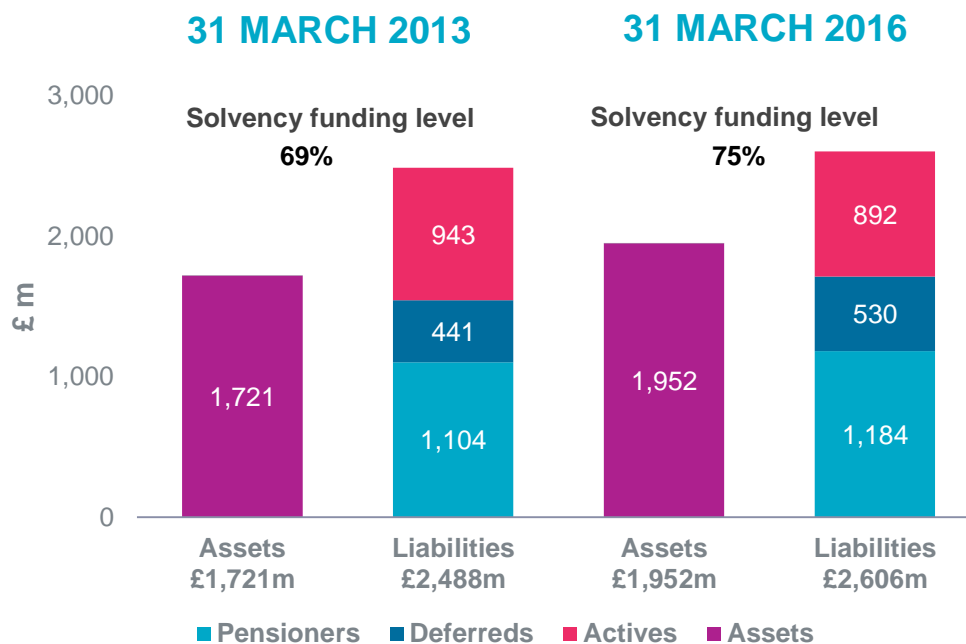
- Assumed rate of future CPI inflation – 2.2% p.a., based on the yields available on gilts and index-linked gilts of appropriate duration less an adjustment of 1% p.a. to allow for the difference between market-implied future RPI and estimated future CPI inflation.
- Real investment returns over and above CPI for past service – 2.15% p.a., based on the anticipated real returns achievable on the Fund's expected long-term investment strategy with a suitable margin for prudence.
- Real investment returns over and above CPI for future service – 2.75% p.a., based on the anticipated real returns achievable on future invested contributions.
- Future pay growth – Depending on individual circumstances, some employers have made allowance for 1% p.a. over the 4 years to April 2020, taking into account the government's policy on pay restraint in the public sector, and then 1.5% p.a. over and above CPI in the longer term.
- Baseline life expectancy based on a scheme-specific mortality study.
- Future mortality improvements based on the CMI 2015 model with a long-term improvement trend of 1.5% p.a.
- An average recovery period for making good any shortfall of 18 years. The FSS sets out the circumstances in which this might vary from one employer to another.

# 3

## KEY RESULTS OF THE FUNDING ASSESSMENT

### SOLVENCY FUNDING POSITION

The table below compares the assets and liabilities of the Fund at 31 March 2016. Figures are also shown for the last valuation as at 31 March 2013 for comparison.



The liability value at 31 March 2016 shown in the table above is known as the Fund's "solvency funding target". The solvency funding target is calculated using assumptions that the Administering Authority has determined are appropriate having consulted with the actuary, and are also set out in the Administering Authority's Funding Strategy Statement (FSS).

The chart shows that **at 31 March 2016 there was a shortfall of £654m** against the Fund's solvency funding target. An alternative way of expressing the position is that the Fund's assets were sufficient to cover 75% of its liabilities – this percentage is known as the solvency funding level of the Fund.

At the previous valuation at 31 March 2013 the shortfall was £767m, equivalent to a solvency funding level of 69%. The key reasons for the changes between the two valuations are considered in Section 4.

Further details of the way in which the solvency funding target has been calculated are set out in Appendix A.

The LGPS Regulations require the contributions to be set so as to secure the Fund's solvency and long-term cost efficiency. In this context solvency means being able to meet the liabilities as and when they arise, with long-term cost efficiency meaning that contribution levels should not be set so as to give rise to additional costs at a later date. In practice, contribution levels have been set so as to target a solvency funding level of 100%, based on the funding parameters outlined in Section 2 above.

## PRIMARY CONTRIBUTION RATE

The valuation looks at the normal employer contribution rate required to cover the cost of the benefits (including death benefits and expenses) that will be built up over the year after the valuation date (the "Primary Contribution Rate"). A summary of the assumptions used is provided in Appendix A.

The table below gives a breakdown of the Primary Contribution Rate at 31 March 2016 and also shows the corresponding rate at 31 March 2013 for comparison. In calculating the average Primary Contribution Rate we have not made any allowance for future members to opt for the 50:50 scheme.

Active members pay contributions to the Fund as a condition of membership in line with the rates required under the governing Regulations (see Appendix D).


PRIMARY CONTRIBUTION RATE	% of Pensionable Pay	
	31 March 2016	31 March 2013
Normal Contribution rate for retirement and death benefits	21.3	20.1
Allowance for administrative expenses	0.4	0.4
Total normal contribution rate	21.7	20.5
Average member contribution rate	6.4	6.4
Primary contribution rate	15.3	14.1

*\* In line with updated CIPFA guidance, the 2016 Primary Contribution Rate is the weighted average of the individual employer Primary Contribution Rates as derived based on their individual circumstances (e.g. whether or not they are closed to new entrants).*


## CORRECTING THE SHORTFALL – SECONDARY CONTRIBUTION RATE

The funding objective as set out in the FSS is to achieve and maintain a solvency funding level of 100% of liabilities (the solvency funding target). In line with the FSS, where a shortfall exists at the effective date of the valuation a deficit recovery plan will be put in place which requires additional contributions to correct the shortfall (or contribution reductions to refund any surplus).

The FSS sets out the process for determining the recovery plan in respect of each employer. At this actuarial valuation the average deficit recovery period adopted is 18 years, and the total initial recovery payment (the "Secondary rate" for 2017/18) is approximately £34 m in £ terms (which also includes allowance for some employers to phase in any increases and treats those employers who have opted to prepay all their 3 year deficit contributions in April 2017 as spreading these amounts over the 3 years).



The "Primary rate" of the employers' contribution is the contribution rate required to meet the cost of the future accrual of benefits including ancillary, death in service and ill health benefits together with administration costs.



The "Secondary rate" of the employers' contribution is an adjustment to the Primary rate to reflect any past service deficit or surplus, to arrive at the rate the employers are required to pay.

# 4

## EXPERIENCE SINCE LAST VALUATION

### SUMMARY OF KEY INTER-VALUATION EXPERIENCE

The last actuarial valuation was carried out with an effective date of 31 March 2013. With effect from 1 April 2014 the scheme's benefit structure changed from a Final Salary Scheme to a Career Average Revalued Earnings (CARE) Scheme, and the 2013 actuarial valuation took these changes into account.

The average Pensionable Salary increase for the Fund members who were in service for the whole of the inter-valuation period was 2.5% per annum.

Pensions in payment (in excess of Guaranteed Minimum Pensions (GMPs)) were increased as guaranteed under the Fund as follows:

- April 2014 2.7%
- April 2015 1.2%
- April 2016 0%

Over the intervaluation period, benefit inflation has averaged 1.3% p.a. Over the three years to 31 March 2016 the gross investment return on the Fund's assets has averaged 5.1% per annum, meaning that the average real return has been about 3.8% p.a.

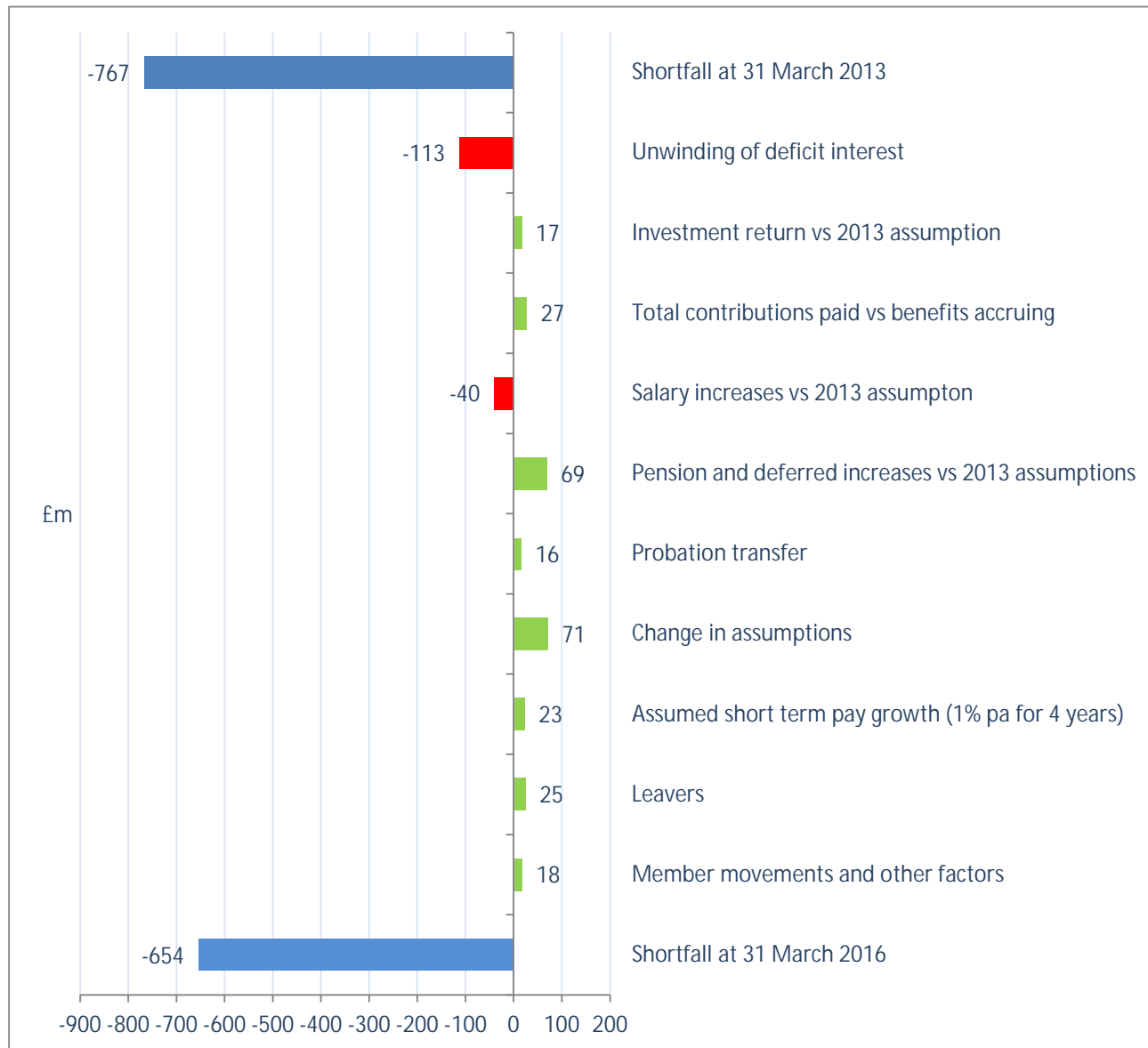


The outcomes from the valuation are determined both by the assumptions adopted for the future, and the Fund's historic experience relative to assumptions made in the past. In this section we consider the effect of the Fund's experience over the last three years.



## REASONS FOR THE CHANGE IN FUNDING POSITION SINCE THE LAST ACTUARIAL VALUATION

The shortfall at the last valuation date was £767m. The chart below sets out the main reasons for the change in the shortfall between 31 March 2013 and 31 March 2016.





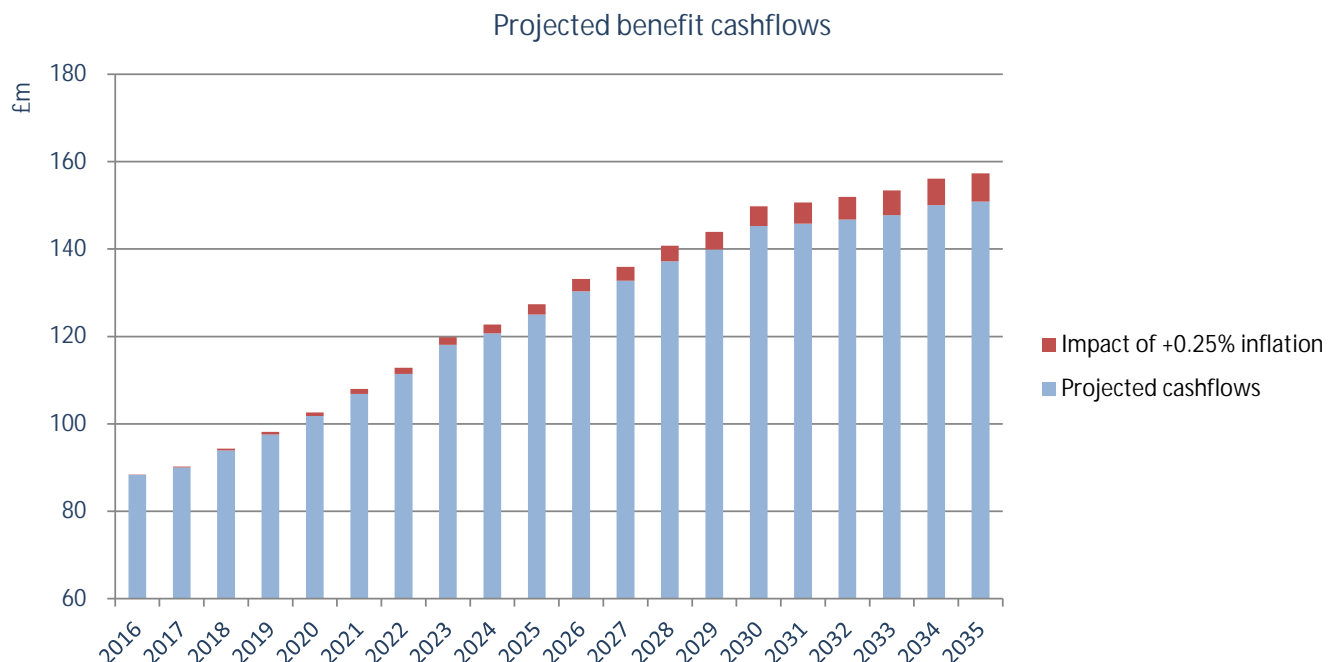
# 5

## CASHFLOWS, RISKS AND ALTERNATIVE FUNDING POSITIONS

### BENEFIT CASHFLOWS

The projected benefit cashflows which result from applying the past service assumptions as set out in Section 2 are shown in the chart below. The additional red elements set out how those projected benefit cashflows would change if we were to assume inflation of 0.25% p.a. higher than the assumption of 2.2% p.a. used for the actuarial valuation. Over the 20 years following the valuation date, the extra benefit payments which would result from the extra 0.25% p.a. inflation assumption are projected to be £57m.

The actuarial valuation process is principally concerned with projecting all the benefit cashflows into the future, and then converting them into present day values by discounting them to allow for assumed future investment returns. The chart shows those projected cashflows, and also illustrates how sensitive they are to the future inflation assumption.



## PROJECTED FUNDING POSITION AT NEXT ACTUARIAL VALUATION

As part of this valuation, the Administering Authority has set an average recovery plan to pay off the shortfall of approximately 18 years. The next actuarial valuation will take place with an effective date of 31 March 2019. If experience up to that date is in line with the assumptions made for this current actuarial valuation and contributions are paid at the agreed rates or amounts, the shortfall at 31 March 2019 would be £626m, equivalent to a funding level of 79%.

## MATERIAL RISKS FACED BY THE FUND

The Fund is subject to some potentially material risks that are, to an extent, outside the Administering Authority's control, but could affect the funding level. Any material worsening of the funding level will mean more contributions are needed (either at an increased rate or at the same rate over a longer period) to be able to provide the benefits built up in the Fund – unless experience acts in other ways to improve the funding level. Examples of such risks, and how the Administering Authority manages them, are:

- If an Employer becomes unable to pay contributions or to make good deficits in the future, the Fund's assets will be lower than expected and the funding level will be worse than expected. The Administering Authority monitors the financial strength of the Employers, as appropriate, so that actions can be taken to mitigate (but not fully remove) the risk.
- If future investment returns on assets are lower than assumed in the valuation, the Fund's assets will be lower, and the funding level worse, than expected. The Administering Authority has a process in place to monitor investment performance quarterly, and it reviews the Fund's investment strategy alongside each actuarial valuation.
- If improvements in life expectancy are greater than assumed, the cost of benefits will increase because members are living longer than expected. This will mean the funding level will be worse than expected. The Administering Authority regularly reviews the Fund's experience and ensures that the assumptions it makes about members' life expectancy take the most recent information available into account.
- If members make decisions about their options which increase the Fund's liabilities, the funding level will be worse than expected. An example would be if members commute less possible pension for cash than is being assumed. The Administering Authority reviews the Fund's experience at each valuation to ensure that their treatment of member options remains appropriate.

## SENSITIVITY OF FUNDING POSITION TO CHANGES IN KEY ASSUMPTIONS

The value placed on the Fund's liabilities is critically dependent on the assumptions used to carry out the calculations. If future experience differs from the assumptions the Administering Authority has used after consulting with the Employers, then the projected future funding level will be different from the level described above.

To illustrate how sensitive the funding level is to experience being different from assumed, the table below shows how the valuation results at 31 March 2016 would have differed given small changes in the key assumptions.

ASSUMPTION CHANGE	CHANGE IN SHORTFALL AT 31 MARCH 2016 (£M)	RESULTANT SHORTFALL AT 31 MARCH 2016 (£M)
Original solvency funding position	-	654
Real investment return 0.25% lower than assumed	105	759
Pensionable Salary growth 0.25% higher than assumed	20	674
Members live one year longer than assumed	60	714
Growth assets fall by 25%	447	1,101

### MINIMUM RISK FUNDING POSITION

In assessing the value of the Fund's liabilities (the solvency funding target), allowance has been made for investment returns as described in Appendix A, taking into account the investment strategy adopted by the Fund, as set out in the Fund's Investment Strategy Statement (ISS).

It is not possible to construct a portfolio of investments which produces a stream of income exactly matching the expected liability outgo. However, it is possible to construct a portfolio which closely matches the liabilities and represents the minimum risk investment position. Such a portfolio would consist mainly of a mixture of long-term index-linked and fixed interest gilts. Investment of the Fund's assets in line with the minimum risk portfolio would minimise fluctuations in the Fund's ongoing funding level between successive actuarial valuations.

If, at the valuation date, the Fund had been invested in this portfolio, then in carrying out the valuation it would not be appropriate to make any allowance for out-performance of the Fund investments. In this event the value of the liabilities would have increased substantially, to £3,802m, and the funding level would have reduced correspondingly to 51%. If the actuarial assumptions are borne out in practice, the projected funding level on this basis at the next actuarial valuation would remain at 51%.

The value of the liabilities on the solvency funding target assumptions was £2,606m, which is £1,196m less than the value on the minimum risk basis. Over the lifetime of the Fund the funding plan is therefore making allowance for future investment returns of £1,196m over and above those available from the minimum risk investment portfolio.

# APPENDICES

A decorative geometric pattern on the right side of the page, consisting of several triangles of varying sizes and shades of blue and grey, arranged in a staggered, overlapping fashion.

# A

## ASSUMPTIONS

### HOW THE BENEFITS ARE VALUED

In order to calculate the liabilities, there is a need to make assumptions about various factors that affect the cost of the benefits provided by the Fund – for example, how long members will live, or the future level of inflation. The table below explains the key assumptions being made in the valuation.

ASSUMPTION	WHY IT IS IMPORTANT AND HOW IT IMPACTS ON THE LIABILITIES
<b>Discount rate</b>	<p>The majority of benefits in a pension fund are paid many years in the future. In the period before the benefits are paid, the Administering Authority invests the funds held by the Fund with the aim of achieving a return on those funds. When calculating how much money is needed now to make these benefit payments, it is appropriate to make allowance for the investment return that is expected to be earned on these funds. This is known as “discounting”.</p> <p>The higher the investment return achieved, the less money needs to be set aside now to pay for benefits. The calculation reflects this by placing a lower value on the liabilities if the “discount rate” is higher.</p>
<b>Inflation</b>	<p>Pensions in payment increase in line with price inflation. Salary growth is also normally linked to price inflation in the long term. A higher inflation assumption will, all other things being equal, lead to a higher value being placed on the liabilities.</p>
<b>Pensionable Salary growth</b>	<p>Benefits earned prior to 1 April 2014 for active members are based on their salaries immediately before retirement, so it is necessary to make an assumption about future Pensionable Salary growth. The higher this assumption, the higher the value placed on the liabilities for active members.</p>
<b>Life expectancy</b>	<p>Pensions are paid while the member (and potentially their spouse or partner) is alive. The longer people live, the greater is the cost of providing a pension. Allowing for longer life expectancy therefore increases the liabilities.</p>

The liabilities of the Fund are calculated by projecting forward all of the future benefit cash flows and discounting them back to the effective date of the valuation, using these assumptions. For example, the liability for a single pensioner is calculated by estimating the amount of each pension payment they will receive in the future, multiplying by the probability that the member will still be alive by the date of each payment, and then discounting each payment back to the effective date of the valuation; and then summing up all of these discounted amounts. The liabilities for the whole Fund are calculated by summing the liabilities for each of the individual members.

## FINANCIAL ASSUMPTIONS USED TO CALCULATE THE SOLVENCY FUNDING TARGET

The table below summarises the key financial assumptions used in the calculation of the solvency funding target and those used for the 31 March 2013 actuarial valuation.

FINANCIAL ASSUMPTIONS	31 March 2016	31 March 2013
Discount rate	4.35% p.a.	4.70% p.a.
Price inflation (CPI)	2.2% p.a.	2.6% p.a.
Salary increases (short term)	1% p.a. for 4 years	1% p.a. for 3 years then 2% p.a. for 2 years
Salary increases (long term)	3.7% p.a.	4.1% p.a.
Pension increases in payment:	2.2% p.a.	2.6% p.a.

## DEMOGRAPHIC ASSUMPTIONS USED

### Post-retirement Mortality

Mortality (or life expectancy) tables are typically made up of three elements: a baseline table (equivalent to the expected current mortality), an allowance for future improvements, and a margin for prudence. Very few pension funds are large enough for them to be able to determine a bespoke set of baseline assumptions based purely on the fund's own membership experience. Typically, the life expectancy assumptions are set by benchmarking a fund's membership profile and mortality experience against larger external datasets. For this actuarial valuation, we have benchmarked the Fund's membership profile and experience against the "S2 tables" published by the CMI. We have applied weightings and age ratings as appropriate to adjust the standard tables so as to arrive at assumptions which are appropriate for the Fund. We have generally used the S2PA tables, other than for female dependants where the S2DA tables have been used. At the 2013 actuarial valuation the S1PA tables were used (S1DA tables for female dependants).

There are two separate decisions on mortality assumptions:

- The baseline table for the current rates of mortality; and
- The allowance for future improvements.

**Baseline**  
Life expectancy today

Measured by LGPS-wide and fund-specific

**Future Changes**  
How things may change

More uncertain and subjective

**Prudence**  
Margin for uncertainty



The weightings and age ratings applied to the above are set out in the table below.

Current Status	Retirement Type	2016 weighting/rating	2013 weighting/rating
Pensioner	Normal Health	99% males, 89% females	94% males, 94% females
	Dependant	123% males, 104% females	158% males, 107% females
	Ill Health	99% males, 89% females with an age rating of +3 years in each case	94% males, 94% females with an age rating of +3 years in each case
	Future dependant	116% males, 111% females	108% males, 96% females
Active	Normal Health	99% males, 89% females	94% males, 94% females
	Ill Health	99% males, 89% females with an age rating of +4 years in each case	94% males, 94% females with an age rating of +3 years in each case
	Future dependant	116% males, 111% females	108% males, 96% females
Deferred	All	99% males, 89% females	94% males, 94% females
	Future dependant	116% males, 111% females	108% males, 96% females

*A weighting applied to an actuarial table has the effect of increasing or reducing the chance of survival at each age, which increases or reduces the corresponding life expectancy. Similarly, an age rating applied to an actuarial table has the effect of assuming that beneficiaries have a life expectancy equal to those older (or younger) than their actual age.*

Future improvements are assumed to follow the CMI 2015 model with a 1.5% p.a. long-term improvements trend for males and females. At the 2013 actuarial valuation the CMI 2012 model with a 1.5% p.a. long-term improvements trend was used.

The mortality assumptions used for the 31 March 2016 valuation result in the following life expectancies.

	Years
Life expectancy for a male aged 65 now	22.6
Life expectancy at 65 for a male aged 45 now	24.7
Life expectancy for a female aged 65 now	25.5
Life expectancy at 65 for a female aged 45 now	27.8




## Pre-retirement Mortality

The following mortality tables (together with any appropriate weightings and age ratings) have been adopted for mortality rates in the period up to retirement.

	31 March 2016	31 March 2013
Base Table	DxL08 tables with adjustments of 80% (male) 50% (female) to reflect the Fund's membership profile	PA92 year of birth tables adjusted by +1 year
Allowance for Future Improvements	CMI_2015 [1.5%]	medium cohort projections

## Commutation

It has been assumed that, on average, 50% of retiring members will take the maximum tax-free cash available at retirement and 50% will take a 3/80ths cash sum (the standard for pre April 2008 service). Members have the option to commute part of their pension at retirement in return for a lump sum at a rate of £12 cash for each £1 per annum of pension given up.




Retirement lump sums are less costly for the Fund to provide than the alternative pension, as members receive only £12 of each £1 p.a. of pension given up. If members take the cash sum option at a higher rate than has been assumed then this will normally lead to an improvement in the funding level.

## Early retirement

For those members who are entitled to receive their accrued benefits (or part of those benefits) prior to the Fund's normal pension age, a proportion of the active membership is assumed to retire in normal health prior to age 65, as set out below:

	% retiring per annum	
Age	Males	Females
60	10	20
61	8	15
62	8	15
63	8	15
64	8	15
65	100	100



If members take early retirement to a greater extent than has been assumed then this will typically lead to a worsening of the funding level. This is because many members are able to take substantial parts of their benefits from age 60 without them being reduced for early payment.

The appropriate early retirement factors applied to the relevant tranche of benefits are in line with GAD guidance.


### Ill health retirement

A small proportion of the active membership has been assumed to retire owing to ill health. As an example of the rates assumed, the following is an extract from the decrement table used:

	% retiring per annum	
Age	Males	Females
35	0.03	0.03
45	0.09	0.09
55	0.41	0.36

The proportion of ill health early retirements falling into each tier category, split by males and females, has been assumed to be as set out below:

	Tier 1	Tier 2	Tier 3
Males	72%	9%	19%
Females	73%	14%	13%




The level of ill-health retirement benefit provided for a member falls into one of three “tiers”, depending on whether and when the member might be expected to resume gainful employment. Tier 1, for example, is on the basis that the member is unlikely to be able to do so before Normal Pension Age. Full details are set out in the LGPS Regulations.

### Withdrawal

This assumption relates to those members who leave the scheme with an entitlement to a deferred pension or transfer value. It has been assumed that active members will leave the Scheme at the following sample rates:

	% leaving per annum	
Age	Males	Females
25	13.50	14.92
35	3.39	4.18
45	1.69	2.59




In relation to pre 2014 benefits, deferred benefits tend to be less costly for the Fund to provide than if the member had remained in the Fund until retirement. If the number of members leaving the Fund is greater than expected then this will typically lead to a slight improvement in the funding level.

## Partners' and Dependants' Proportions

It has been assumed that the proportions of members below will on death give rise to a dependant's pension (spouse's and partner's), and that spouses/partners of female (male) members are three years older (younger), on average than the member.

% spouse/partner		% spouse/partner
Age	Males	Females
25	43	46
35	69	60
45	72	60
55	74	60
65	76	55



If more members than assumed have partners then this will lead to an increase in the number of dependants pensions coming into payment over and above that expected. This would lead to a worsening of the funding level.

## ASSUMPTIONS USED TO CALCULATE THE PRIMARY CONTRIBUTION RATE

The cost of future accrual (the Primary Contribution Rate) has been calculated using the same actuarial assumptions as used to calculate the solvency funding target and recovery plan as set out above except that the financial assumptions adopted are as described below.

The financial assumptions for assessing the future service contribution rate should take account of the fact that contributions will be invested in market conditions applying at future dates, which are unknown at the effective date of the valuation, and which are not directly linked to market conditions at the valuation date.

The financial assumptions in relation to future service (i.e. the Primary Contribution Rate) are not specifically linked to investment conditions as at the valuation date itself, and are based on an overall assumed real return (i.e. return in excess of price inflation) of 2.75% per annum. This represents a reduction of 0.25% per annum compared to the 2013 valuation, which increases the estimated cost of providing LGPS benefits. With a long term average assumption for price inflation of 2.2% per annum, this gives rise to an overall discount rate of 4.95% p.a..

# B

## SUMMARY MEMBERSHIP DATA

The membership data is summarised in the table, with figures at the previous valuation shown for comparison.

Data in relation to members of the Fund were supplied by the Fund's administrator on behalf of the Administering Authority. The accuracy of the data provided has been relied on. While reasonableness checks on the data have been carried out, they do not guarantee the completeness or the accuracy of the data. Consequently Mercer does not accept any liability in respect of its advice where it has relied on data that is incomplete or inaccurate.

	31 March 2016	31 March 2013
<b>Active members</b>		
Number	21,971	19,549
Total Pensionable Salaries (£000s p.a.)	336,420	315,646
Average Pensionable Salary (£ p.a.)	15,312	16,146
Average age (pension weighted)	49.9	49.8

<b>Deferred pensioners</b>		
Number	20,759	16,711
Total deferred pensions revalued to valuation date (£000s p.a.)	30,062	23,423
Average deferred pension (£ p.a.)	1,448	1,402
Average age (pension weighted)	49.2	48.7

<b>Pensioners</b>		
Number	16,325	14,985
Total pensions payable (£000s p.a.)	76,553	69,127
Average pension (£ p.a.)	4,689	4,613
Average age (pension weighted)	70.6	69.9

The above pensioner figures include current dependant pensioners.

# C

## ASSETS

The market value of the Fund's assets was £1,952,300,000 on the valuation date.

The Administering Authority's investment strategy is to proportion the Fund's assets by asset class as shown in the table below. The actual distribution of assets will vary over time due to changes in financial markets. The table also shows the distribution of assets at the valuation date.

	INVESTMENT STRATEGY	ACTUAL MARKET VALUE OF ASSETS AT 31 MARCH 2016	
	%	£000s	%
UK equities	25.5%	559,900	28.7%
Overseas equities	54.5%	1,067,600	54.7%
Property / Infrastructure	10.0%	160,400	8.2%
Corporate bonds	10.0%	122,000	6.3%
Cash	0.0%	20,000	1.0%
Current assets/liabilities	0.0%	22,400	1.1%
Total	100.0%	1,952,300	100%

The Administering Authority also holds additional voluntary contributions (AVCs) which are separately invested. These assets have been excluded from the market value shown as they exactly match the value of the benefits they cover.

The details of the assets at the valuation date and the financial transactions during the inter-valuation period have been obtained from the audited accounts for the Fund.

# D

## SCHEME BENEFITS

The benefits valued within our calculations are those in force at the effective date of the valuation. Full details of these can be found in the Local Government Pension Scheme Regulations 2013 (as amended):

The Local Government Pension Scheme Regulations 2013  
(<http://www.legislation.gov.uk/ukxi/2013/2356/contents/made>)

The Local Government Pension Scheme (Transitional Provisions, Savings and Amendment) Regulations 2014 (<http://www.legislation.gov.uk/ukxi/2014/525/contents/made>)

The direction by the Treasury dated 5 April 2016 under Section 59A of the Social Security Pensions Act 1975 (<http://www.lgpsregs.org/images/OtherGuidance/HMTDirectionApr2016.pdf>)

We have made no allowance for other changes which may be introduced in the future. The Fund is also responsible for paying and, where appropriate, recharging to employers the benefits arising from the award of compensatory added years (CAY) of service on premature retirement. Unless these CAY benefits have been converted into “funded” benefits, they are normally recharged to the relevant employer (together with associated pension increases), and so are excluded from the valuation.

The benefits that will emerge from money purchase AVCs paid by members, and SCAVCs paid by employers, and the corresponding invested assets in respect of these AVCs and SCAVCs, have been excluded from the valuation.

UK and European law requires pension schemes to provide equal benefits to men and women in respect of service after 17 May 1990 (the date of the “Barber” judgement) and this includes providing equal benefits accrued from that date to reflect the differences in GMPs. There is no consensus or legislative guidance as to what adjustments have to be made to scheme benefits to correct these inequalities for ongoing schemes (i.e. for schemes other than those which are in the Pension Protection Fund). The valuation makes no allowance for removal of these inequalities. It is consequently possible that additional funding will be required for equalisation once the law has been clarified. It is recommended that the Administering Authority seek further professional advice if it is concerned about this issue.

## E

## SUMMARY OF INCOME AND EXPENDITURE

INCOME	YEAR ENDING 31 MARCH			Total £000s
	2014 £000s	2015 £000s	2016 £000s	
<b>Fund at beginning of year</b>	1,720,800	1,797,100	1,987,300	1,720,800
Contributions to Fund:				
Employees	20,800	21,100	21,700	63,600
Employers	71,500	78,500	82,600	232,600
Transfer Values received	7,400	4,100	5,400	16,900
Investment income	42,200	40,800	38,100	121,100
Change in market value of investments	35,300	202,300	(73,600)	164,000

EXPENDITURE	YEAR ENDING 31 MARCH			Total £000s
	2014 £000s	2015 £000s	2016 £000s	
Pensions for members/ spouses/partners/dependants	69,400	72,100	75,000	216,500
Retiring allowances and death gratuities	19,000	20,700	18,900	58,600
Transfer Values paid	6,500	57,300	7,300	71,100
Investment expenses	4,800	5,300	6,700	16,800
Administration expenses	1,200	1,200	1,300	3,700
<b>Fund at end of year</b>	1,797,100	1,987,300	1,952,300	1,952,300



## F

## ANALYSIS OF MEMBERSHIP EXPERIENCE

The analysis below compares the actual experience over the 3 year period with the assumptions used for the 2016 valuation.

	ACTUAL	EXPECTED	%
Ill Health Retirements	143	154	93
Withdrawals	7,193	2,044	352
Pensioner Deaths (lives)	1,225	1,058	116
Pensioner Deaths (£000 p.a. of pension)	4,193	3,880	108

Note that actual withdrawals can include members moving to another LGPS Fund, bulk transfers and also transfers under the special transfer club terms.



# RATES AND ADJUSTMENTS CERTIFICATE ISSUED IN ACCORDANCE WITH REGULATION 62

## NAME OF FUND

Worcestershire County Council Pension  
Fund

## PRIMARY CONTRIBUTION RATE

I hereby certify that, in my opinion, the primary rate of the employers' contribution for the whole Fund for each of the three years beginning 1 April 2017 is 15.3% of pensionable pay.

The primary rate of contribution for each employer for the three year period beginning 1 April 2017 is set out in the attached schedule.

## SECONDARY CONTRIBUTION RATE

I hereby certify that, in my opinion, the secondary rate of the employer's contribution for the whole Fund for each of the three years beginning 1 April 2017 is as follows:

2017/18	£36.3 million less 0.6% of pensionable pay
2018/19	£36.8 million less 0.2% of pensionable pay
2019/20	£37.3 million

The secondary rate of contribution for each employer for each of the three years beginning 1 April 2017 is set out in the attached schedule.

## CONTRIBUTION AMOUNTS PAYABLE

The total contribution payable for each employer is the total of the primary and secondary rates as detailed in the attached schedule. Contributions will be paid monthly in arrears with each payment normally being due by the 19th of the following month (or the 22nd if paid electronically) unless otherwise noted in the schedule.

## FURTHER ADJUSTMENTS

A further individual adjustment shall be applied in respect of each non-ill health early retirement occurring in the period of three years covered by this certificate. This further individual adjustment will be calculated in accordance with methods agreed from time to time between the Fund's Actuary and the Administering Authority.

The contributions set out in the attached schedule represent the minimum contribution which may be paid by each employer in total over the 3 years covered by the certificate. Additional contributions or a different pattern of contributions may be paid if requested by the employer concerned at the sole discretion of the Administering Authority as agreed with the Actuary. The total contributions payable by each employer will be subject to a minimum of zero.


The individual employer contributions may be varied as agreed by the Actuary and Administering Authority to reflect any changes in contribution requirements as a result of any benefit costs being insured with a third party or parties including where the third party or parties participate in the Fund.

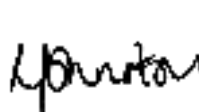
In cases where an element of an existing Scheme employer's deficit is transferred to a new employer on its inception, the Scheme employer's deficit recovery contributions, as shown on the schedule to this Certificate in Appendix H, may be reallocated between the Scheme employer and the new employer to reflect this, on advice of the Actuary and as agreed with the Administering Authority so that the total payments remain the same overall.

The Administering Authority and employer with advice from the Fund's Actuary can agree that contributions payable under this certificate can be sourced under an alternative financing arrangement which provides the Fund with equivalent cash contributions.

### REGULATION 62(8)

No allowance for non-ill health early retirements has been made in determining the results of the valuation, on the basis that the costs arising will be met by additional contributions. Allowance for ill health retirements has been included in each employer's contribution rate, on the basis of the method and assumptions set out in the report.

Signature: 

Signature: 

**Name:** Ian Kirk

**Name:** Leanne Johnston

**Qualification:** Fellow of the Institute  
and Faculty of Actuaries

**Qualification:** Fellow of the Institute  
and Faculty of Actuaries

**Date of signing:** 31 March 2017

**Date of signing:** 31 March 2017



## SCHEDULE TO THE RATES AND ADJUSTMENTS CERTIFICATE DATED 31 MARCH 2017

Employer	Employer Number	Notes	Primary rate 2017/18 to 2019/20	Secondary rates			Total Contribution rates		
				2017/18	2018/19	2019/20	2017/18	2018/19	2019/20
Scheme Employers									
Aspire (Free School Trust)	243		14.1%	£16,800	£17,400	£18,000	14.1% plus £16,800	14.1% plus £17,400	14.1% plus £18,000
Bromsgrove District Council	2	1	14.4%	£1,002,000	£995,000	£989,000	14.4% plus £1,002,000	14.4% plus £995,000	14.4% plus £989,000
Combined Police	1000		14.2%	£3,103,000	£3,221,000	£3,338,000	14.2% plus £3,103,000	14.2% plus £3,221,000	14.2% plus £3,338,000
Heart of Worcestershire College	76		14.4%	£631,000	£654,300	£678,500	14.4% plus £631,000	14.4% plus £654,300	14.4% plus £678,500
Hereford and Worcester Fire Civilians	23	1	14.8%	£303,000	£300,000	£297,000	14.8% plus £303,000	14.8% plus £300,000	14.8% plus £297,000
Hereford College of Arts	42	2	13.6%	£30,150	£31,230	£32,400	13.6% plus £30,150	13.6% plus £31,230	13.6% plus £32,400
Hereford College of Technology	41		16.4%	£240,500	£249,400	£258,600	16.4% plus £240,500	16.4% plus £249,400	16.4% plus £258,600
Hereford Sixth Form College	50	2	17.9%	£57,370	£59,520	£61,670	17.9% plus £57,370	17.9% plus £59,520	17.9% plus £61,670
Herefordshire Council	104	2	15.6%	£6,660,000	£6,900,000	£7,150,000	15.6% plus £6,660,000	15.6% plus £6,900,000	15.6% plus £7,150,000

Employer	Employer Number	Notes	Primary rate 2017/18 to 2019/20	Secondary rates			Total Contribution rates		
				2017/18	2018/19	2019/20	2017/18	2018/19	2019/20
Joint Museum Shared Service	95		16.3%	£11,600	£12,000	£12,400	16.3% plus £11,600	16.3% plus £12,000	16.3% plus £12,400
Malvern Hills District Council	5	2	14.6%	£822,000	£852,000	£881,000	14.6% plus £822,000	14.6% plus £852,000	14.6% plus £881,000
Redditch Borough Council	6	1	14.7%	£2,119,000	£2,106,000	£2,093,000	14.7% plus £2,119,000	14.7% plus £2,106,000	14.7% plus £2,093,000
Regulatory Shared Services (Bromsgrove)	321		15.7%	£134,400	£139,400	£144,600	15.7% plus £134,400	15.7% plus £139,400	15.7% plus £144,600
Robert Owen	377	2	15.2%	£390	£390	£390	15.2% plus £390	15.2% plus £390	15.2% plus £390
South Worcestershire College	59		16.3%	£90,100	£93,400	£96,900	16.3% plus £90,100	16.3% plus £93,400	16.3% plus £96,900
Town and Parish Councils	502		16.8%	10.9%	10.9%	10.9%	27.7%	27.7%	27.7%
University of Worcester	24		13.4%	£621,800	£644,800	£668,700	13.4% plus £621,800	13.4% plus £644,800	13.4% plus £668,700
Worcester City Council	8	1	15.1%	£1,398,000	£1,389,000	£1,381,000	15.1% plus £1,398,000	15.1% plus £1,389,000	15.1% plus £1,381,000
Worcester Sixth Form College	49	1	14.6%	£55,210	£54,880	£54,570	14.6% plus £55,210	14.6% plus £54,880	14.6% plus £54,570
Worcestershire County Council	500		15.2%	-1.6% plus £11,230,000	-0.8% plus £11,650,000	£12,080,000	13.6% plus £11,230,000	14.4% plus £11,650,000	15.2% plus £12,080,000
Wychavon District Council	9	1,3	14.8%	£1,184,000	£1,173,000	£1,169,000	14.8% plus £1,184,000	14.8% plus £1,173,000	14.8% plus £1,169,000
Wyre Forest District Council	10	1	15.3%	£1,762,000	£1,754,000	£1,744,000	15.3% plus £1,762,000	15.3% plus £1,754,000	15.3% plus £1,744,000

Employer	Employer Number	Notes	Primary rate 2017/18 to 2019/20	Secondary rates			Total Contribution rates		
				2017/18	2018/19	2019/20	2017/18	2018/19	2019/20
Academies									
Advance Trust T/A Kingfisher	237		15.7%	£17,100	£17,700	£18,400	15.7% plus £17,100	15.7% plus £17,700	15.7% plus £18,400
Advance Trust T/A Newbridge	238		17.1%	£5,500	£5,700	£5,900	17.1% plus £5,500	17.1% plus £5,700	17.1% plus £5,900
Advance Trust T/A Riversides	239		12.9%	£19,900	£20,600	£21,400	12.9% plus £19,900	12.9% plus £20,600	12.9% plus £21,400
Advanced Trust Vale of Evesham	240		13.9%	-0.6% plus £112,900	-0.5% plus £125,900	-0.3% plus £138,900	13.3% plus £112,900	13.4% plus £125,900	13.6% plus £138,900
Ashperton Primary Academy Trust	362		14.0%	£6,800	£7,100	£7,400	14.0% plus £6,800	14.0% plus £7,100	14.0% plus £7,400
Astwood Bank	241		18.7%	£14,500	£15,000	£15,600	18.7% plus £14,500	18.7% plus £15,000	18.7% plus £15,600
Barrs Court	354	2	12.2%	£51,790	£53,740	£55,700	12.2% plus £51,790	12.2% plus £53,740	12.2% plus £55,700
Baxter College	244		13.9%	£84,600	£87,700	£90,900	13.9% plus £84,600	13.9% plus £87,700	13.9% plus £90,900
Bengeworth	245		16.1%	£45,800	£47,500	£49,300	16.1% plus £45,800	16.1% plus £47,500	16.1% plus £49,300
Bishop Perwone Church of England College	251		17.3%	£47,800	£49,600	£51,400	17.3% plus £47,800	17.3% plus £49,600	17.3% plus £51,400
Brockhampton Academy Trust	361		16.1%	£7,100	£7,400	£7,700	16.1% plus £7,100	16.1% plus £7,400	16.1% plus £7,700
Brookfield	367		16.5%	£38,600	£40,000	£41,500	16.5% plus £38,600	16.5% plus £40,000	16.5% plus £41,500

Employer	Employer Number	Notes	Primary rate 2017/18 to 2019/20	Secondary rates			Total Contribution rates		
				2017/18	2018/19	2019/20	2017/18	2018/19	2019/20
Burghill	359		17.5%	£4,100	£4,300	£4,500	17.5% plus £4,100	17.5% plus £4,300	17.5% plus £4,500
Canon Pyon	365		15.3%	£8,400	£8,700	£9,000	15.3% plus £8,400	15.3% plus £8,700	15.3% plus £9,000
Christopher Whitehead Language College	254		18.1%	-1.5% plus £54,000	-0.8% plus £56,000	£58,100	16.6% plus £54,000	17.3% plus £56,000	18.1% plus £58,100
ContinU Plus	248		13.3%	£13,200	£13,700	£14,200	13.3% plus £13,200	13.3% plus £13,700	13.3% plus £14,200
Crabbs Cross	253	2	13.3%	£10,080	£10,470	£10,870	13.3% plus £10,080	13.3% plus £10,470	13.3% plus £10,870
Droitwich Spa High School and Sixth Form Centre	256		15.9%	£98,500	£102,100	£105,900	15.9% plus £98,500	15.9% plus £102,100	15.9% plus £105,900
Dyson Perrins Church of England Academy	258		17.5%	£78,800	£81,700	£84,700	17.5% plus £78,800	17.5% plus £81,700	17.5% plus £84,700
Fairfield	358		17.4%	£38,700	£40,100	£41,600	17.4% plus £38,700	17.4% plus £40,100	17.4% plus £41,600
Great Malvern Academy Limited	260	2	15.1%	£29,860	£30,930	£32,110	15.1% plus £29,860	15.1% plus £30,930	15.1% plus £32,110
Hanley Castle High School	262	2	15.0%	£54,140	£56,090	£58,150	15.0% plus £54,140	15.0% plus £56,090	15.0% plus £58,150
Haybridge High School	264		17.2%	-0.3% plus £95,800	£99,300	£103,000	16.9% plus £95,800	17.2% plus £99,300	17.2% plus £103,000
Hereford Academy Limited	63		16.9%	£73,300	£76,000	£78,800	16.9% plus £73,300	16.9% plus £76,000	16.9% plus £78,800
Hereford Steiner Academy	68		16.7%	(£1,400)	(£1,500)	(£1,600)	16.7% less £1,400	16.7% less £1,500	16.7% less £1,600



Employer	Employer Number	Notes	Primary rate 2017/18 to 2019/20	Secondary rates			Total Contribution rates		
				2017/18	2018/19	2019/20	2017/18	2018/19	2019/20
Hollymount	261		16.4%	£29,400	£30,500	£31,600	16.4% plus £29,400	16.4% plus £30,500	16.4% plus £31,600
Holmer Church of England Academy	363	2	13.5%	£6,660	£6,950	£7,240	13.5% plus £6,660	13.5% plus £6,950	13.5% plus £7,240
Honeybourne	265		14.3%	£8,400	£8,700	£9,000	14.3% plus £8,400	14.3% plus £8,700	14.3% plus £9,000
John Kyrle High School & Sixth Form Centre	364	2	17.0%	£111,700	£115,810	£120,120	17.0% plus £111,700	17.0% plus £115,810	17.0% plus £120,120
John Masefield High School and Sixth Form Centre	366	2	16.5%	£54,820	£56,880	£58,930	16.5% plus £54,820	16.5% plus £56,880	16.5% plus £58,930
King Charles 1 School	249	2	16.3%	£91,240	£94,570	£98,090	16.3% plus £91,240	16.3% plus £94,570	16.3% plus £98,090
Kingstone Academy Trust	370		14.8%	£58,900	£61,100	£63,400	14.8% plus £58,900	14.8% plus £61,100	14.8% plus £63,400
Lady Hawkins School	373		20.7%	£34,100	£35,400	£36,700	20.7% plus £34,100	20.7% plus £35,400	20.7% plus £36,700
Lickhill Primary	274		12.8%	£5,200	£5,400	£5,600	12.8% plus £5,200	12.8% plus £5,400	12.8% plus £5,600
Llangrove	369	2	17.5%	£4,990	£5,190	£5,380	17.5% plus £4,990	17.5% plus £5,190	17.5% plus £5,380
Lugwardine Primary Academy Trust	371		18.4%	£19,600	£20,300	£21,100	18.4% plus £19,600	18.4% plus £20,300	18.4% plus £21,100
Marden	375		18.7%	£9,800	£10,200	£10,600	18.7% plus £9,800	18.7% plus £10,200	18.7% plus £10,600
Matchborough	263		18.0%	£18,900	£19,600	£20,300	18.0% plus £18,900	18.0% plus £19,600	18.0% plus £20,300

Employer	Employer Number	Notes	Primary rate 2017/18 to 2019/20	Secondary rates			Total Contribution rates		
				2017/18	2018/19	2019/20	2017/18	2018/19	2019/20
Mordiford	376		18.7%	£6,900	£7,200	£7,500	18.7% plus £6,900	18.7% plus £7,200	18.7% plus £7,500
Nunnery Wood High School	266		16.2%	£112,700	£116,900	£121,200	16.2% plus £112,700	16.2% plus £116,900	16.2% plus £121,200
Oasis - Warndon	267		15.1%	£35,800	£37,100	£38,500	15.1% plus £35,800	15.1% plus £37,100	15.1% plus £38,500
Ormiston - Tenbury	279		18.0%	£35,300	£36,600	£38,000	18.0% plus £35,300	18.0% plus £36,600	18.0% plus £38,000
Our Lady of Lourdes	259		16.5%	£136,200	£141,200	£146,400	16.5% plus £136,200	16.5% plus £141,200	16.5% plus £146,400
Perrywood	275		13.6%	£33,600	£34,800	£36,100	13.6% plus £33,600	13.6% plus £34,800	13.6% plus £36,100
Pershore High School	268		15.7%	-1.8% plus £95,200	-0.9% plus £98,700	£102,400	13.9% plus £95,200	14.8% plus £98,700	15.7% plus £102,400
Queen Elizabeth Humanities College Academy Trust	374		16.2%	£32,800	£34,000	£35,300	16.2% plus £32,800	16.2% plus £34,000	16.2% plus £35,300
Redditch RSA Academies Trust	242	2	17.0%	£113,850	£118,060	£122,460	17.0% plus £113,850	17.0% plus £118,060	17.0% plus £122,460
Regency	277	2	15.6%	£85,750	£88,890	£92,220	15.6% plus £85,750	15.6% plus £88,890	15.6% plus £92,220
Ridgeway	269		16.4%	£14,800	£15,300	£15,900	16.4% plus £14,800	16.4% plus £15,300	16.4% plus £15,900
Rivers Multi Academy Trust	257		16.1%	£57,600	£59,700	£61,900	16.1% plus £57,600	16.1% plus £59,700	16.1% plus £61,900
Somers Park School	276		12.9%	£26,000	£27,000	£28,000	12.9% plus £26,000	12.9% plus £27,000	12.9% plus £28,000

Employer	Employer Number	Notes	Primary rate 2017/18 to 2019/20	Secondary rates			Total Contribution rates		
				2017/18	2018/19	2019/20	2017/18	2018/19	2019/20
South Bromsgrove	270		15.6%	£64,200	£66,600	£69,100	15.6% plus £64,200	15.6% plus £66,600	15.6% plus £69,100
St Johns	271	2	15.3%	£32,700	£33,870	£35,140	15.3% plus £32,700	15.3% plus £33,870	15.3% plus £35,140
St Matthias Church of England Primary Academy	272		16.6%	£13,200	£13,700	£14,200	16.6% plus £13,200	16.6% plus £13,700	16.6% plus £14,200
St Nicholas Owen Catholic Multi Academy Trust	287		15.8%	£108,200	£112,200	£116,400	15.8% plus £108,200	15.8% plus £112,200	15.8% plus £116,400
St Pauls Church of England Primary School	381		16.4%	£20,800	£21,600	£22,400	16.4% plus £20,800	16.4% plus £21,600	16.4% plus £22,400
St Thomas Cantilupe	382		16.4%	£7,800	£8,100	£8,400	16.4% plus £7,800	16.4% plus £8,100	16.4% plus £8,400
Stourport on Severn High & VI Form Centre	273		14.4%	£87,900	£91,200	£94,600	14.4% plus £87,900	14.4% plus £91,200	14.4% plus £94,600
Stretton Sugwas Church of England Academy	378		12.7%	£7,700	£8,000	£8,300	12.7% plus £7,700	12.7% plus £8,000	12.7% plus £8,300
Suckley School	278		13.0%	£3,300	£3,400	£3,500	13.0% plus £3,300	13.0% plus £3,400	13.0% plus £3,500
Tenbury Primary School (BAET)	383		18.6%	£18,000	£18,700	£19,400	18.6% plus £18,000	18.6% plus £18,700	18.6% plus £19,400
The Chantry School	252		16.2%	-1.2% plus £46,200	-0.6% plus £47,900	£49,700	15.0% plus £46,200	15.6% plus £47,900	16.2% plus £49,700
The Chase School	250	2	15.6%	£123,930	£128,530	£133,330	15.6% plus £123,930	15.6% plus £128,530	15.6% plus £133,330
The Coppice Primary School	255		15.6%	£31,400	£32,600	£33,800	15.6% plus £31,400	15.6% plus £32,600	15.6% plus £33,800

Employer	Employer Number	Notes	Primary rate 2017/18 to 2019/20	Secondary rates			Total Contribution rates		
				2017/18	2018/19	2019/20	2017/18	2018/19	2019/20
The Herefordshire Marches Federation of Academies	360		15.0%	£66,900	£69,400	£72,000	15.0% plus £66,900	15.0% plus £69,400	15.0% plus £72,000
The Prince Henry's High School Academy Trust	75		17.6%	£73,600	£76,300	£79,100	17.6% plus £73,600	17.6% plus £76,300	17.6% plus £79,100
Trinity High School & Sixth Form Centre	280	1	14.8%	£69,800	£69,330	£68,860	14.8% plus £69,800	14.8% plus £69,330	14.8% plus £68,860
Tudor Grange (Redditch)	73		18.0%	£41,400	£42,900	£44,500	18.0% plus £41,400	18.0% plus £42,900	18.0% plus £44,500
Tudor Grange Academy	74		14.8%	£57,300	£59,400	£61,600	14.8% plus £57,300	14.8% plus £59,400	14.8% plus £61,600
Vaynor First	281	2	15.8%	£22,420	£23,200	£24,080	15.8% plus £22,420	15.8% plus £23,200	15.8% plus £24,080
Walkwood Academy Trust	286		16.8%	£33,900	£35,200	£36,500	16.8% plus £33,900	16.8% plus £35,200	16.8% plus £36,500
Waseley Hills High School	283		18.3%	£71,300	£73,900	£76,600	18.3% plus £71,300	18.3% plus £73,900	18.3% plus £76,600
Webheath First School Academy	284	2	16.6%	£12,330	£12,820	£13,310	16.6% plus £12,330	16.6% plus £12,820	16.6% plus £13,310
Whitecross Hereford High School	384		17.0%	£65,600	£68,000	£70,500	17.0% plus £65,600	17.0% plus £68,000	17.0% plus £70,500
Wigmore School	386		17.0%	£51,500	£53,400	£55,400	17.0% plus £51,500	17.0% plus £53,400	17.0% plus £55,400
Woodfield Academy	285		16.8%	£37,300	£38,700	£40,100	16.8% plus £37,300	16.8% plus £38,700	16.8% plus £40,100
Woodrush High School and Academy for Students aged 11-18 Ltd	282		13.2%	£60,100	£62,300	£64,600	13.2% plus £60,100	13.2% plus £62,300	13.2% plus £64,600

Employer	Employer Number	Notes	Primary rate 2017/18 to 2019/20	Secondary rates			Total Contribution rates		
				2017/18	2018/19	2019/20	2017/18	2018/19	2019/20
Transferee Admission Bodies									
4 Children	212		18.2%	(£11,600)	(£12,000)	(£12,400)	18.2% less £11,600	18.2% less £12,000	18.2% less £12,400
Action for Children	211		18.8%	(£3,500)	(£3,600)	(£3,700)	18.8% less £3,500	18.8% less £3,600	18.8% less £3,700
Action for Children Malvern	213		23.9%	Nil	Nil	Nil	23.9%	23.9%	23.9%
Addaction	214		17.2%	£100	£100	£100	17.2% plus £100	17.2% plus £100	17.2% plus £100
Alliance in Partnership	418		22.1%	Nil	Nil	Nil	22.1%	22.1%	22.1%
Arete	420		11.8%	(£1,100)	(£1,100)	(£1,100)	11.8% less £1,100	11.8% less £1,100	11.8% less £1,100
ATEGI	198		26.3%	£100	£100	£100	26.3% plus £100	26.3% plus £100	26.3% plus £100
Aztec Watersports	197		15.8%	(£800)	(£800)	(£800)	15.8% less £800	15.8% less £800	15.8% less £800
Babcock Training Limited	215		19.6%	(£68,100)	(£70,600)	(£73,200)	19.6% less £68,100	19.6% less £70,600	19.6% less £73,200
Balfour Beatty Living Places	208		21.7%	(£60,400)	(£62,600)	(£64,900)	21.7% less £60,400	21.7% less £62,600	21.7% less £64,900
Bespoke Cleaning Services	425		24.2%	£500	£500	£500	24.2% plus £500	24.2% plus £500	24.2% plus £500
Brandon Trust	430		20.1%	£4,600	£4,800	£5,000	20.1% plus £4,600	20.1% plus £4,800	20.1% plus £5,000

Employer	Employer Number	Notes	Primary rate 2017/18 to 2019/20	Secondary rates			Total Contribution rates		
				2017/18	2018/19	2019/20	2017/18	2018/19	2019/20
Brightstripe	355		18.2%	(£1,000)	(£1,000)	(£1,000)	18.2% less £1,000	18.2% less £1,000	18.2% less £1,000
Bromsgrove PFI	92		18.0%	(£2,300)	(£2,400)	(£2,500)	18.0% less £2,300	18.0% less £2,400	18.0% less £2,500
CAPITA	440		16.9%	Nil	Nil	Nil	16.9%	16.9%	16.9%
CIVICA (HUB)	308		19.8%	(£400)	(£400)	(£400)	19.8% less £400	19.8% less £400	19.8% less £400
CIVICA (WDC)	309		16.1%	(£60,500)	(£62,700)	(£65,000)	16.1% less £60,500	16.1% less £62,700	16.1% less £65,000
Cygnat foods	199		14.9%	£100	£100	£100	14.9% plus £100	14.9% plus £100	14.9% plus £100
Field Studies Council	452		22.3%	Nil	Nil	Nil	22.3%	22.3%	22.3%
FOCSA Services UK Limited	202		19.8%	£5,100	£5,300	£5,500	19.8% plus £5,100	19.8% plus £5,300	19.8% plus £5,500
Freedom Leisure	450		13.3%	(£3,400)	(£3,500)	(£3,600)	13.3% less £3,400	13.3% less £3,500	13.3% less £3,600
Herecad Enterprises Limited	357		20.3%	(£100)	(£100)	(£100)	20.3% less £100	20.3% less £100	20.3% less £100
Hewlett Packard	460		18.2%	(£100)	(£100)	(£100)	18.2% less £100	18.2% less £100	18.2% less £100
Initial Facilities (Rentokil)	210		22.7%	(£1,100)	(£1,100)	(£1,100)	22.7% less £1,100	22.7% less £1,100	22.7% less £1,100
Integral UK Limited (Interserve)	209		20.0%	(£4,800)	(£5,000)	(£5,200)	20.0% less £4,800	20.0% less £5,000	20.0% less £5,200

Employer	Employer Number	Notes	Primary rate 2017/18 to 2019/20	Secondary rates			Total Contribution rates		
				2017/18	2018/19	2019/20	2017/18	2018/19	2019/20
JACOBS	470		21.6%	£300	£300	£300	21.6% plus £300	21.6% plus £300	21.6% plus £300
Liberata	475		19.8%	Nil	Nil	Nil	19.8%	19.8%	19.8%
Midland Heart	205		18.4%	(£8,500)	(£8,800)	(£9,100)	18.4% less £8,500	18.4% less £8,800	18.4% less £9,100
National Youth Advocacy Service	480		20.7%	£300	£300	£300	20.7% plus £300	20.7% plus £300	20.7% plus £300
NHS Redditch and Bromsgrove CCG	478		21.8%	(£1,100)	(£1,100)	(£1,100)	21.8% less £1,100	21.8% less £1,100	21.8% less £1,100
Place Partnership	218		19.4%	-6.6%	Nil	Nil	12.8%	19.4%	19.4%
Reach Assisted Living	219		22.3%	Nil	Nil	Nil	22.3%	22.3%	22.3%
Redcliffe Catering Limited	320		21.1%	£1,500	£1,600	£1,700	21.1% plus £1,500	21.1% plus £1,600	21.1% plus £1,700
Ringway	204		18.9%	£36,900	£38,300	£39,700	18.9% plus £36,900	18.9% plus £38,300	18.9% plus £39,700
Shaw Healthcare Limited	90		21.6%	£33,500	£34,700	£36,000	21.6% plus £33,500	21.6% plus £34,700	21.6% plus £36,000
Timberdine	220		22.0%	Nil	Nil	Nil	22.0%	22.0%	22.0%
TTB Contracts	490		15.1%	Nil	Nil	Nil	15.1%	15.1%	15.1%
Wychavon Leisure Community Association (Bromsgrove)	84		8.3%	£600	£600	£600	8.3% plus £600	8.3% plus £600	8.3% plus £600

Employer	Employer Number	Notes	Primary rate 2017/18 to 2019/20	Secondary rates			Total Contribution rates		
				2017/18	2018/19	2019/20	2017/18	2018/19	2019/20
Community Admission Bodies									
Bromsgrove Housing Trust	30	2	16.9%	-2.2% plus £130,000	-1.1% plus £134,800	£139,790	14.7% plus £130,000	15.8% plus £134,800	16.9% plus £139,790
Encore Enterprises Limited	356		20.7%	(£1,000)	(£1,000)	(£1,000)	20.7% less £1,000	20.7% less £1,000	20.7% less £1,000
Fortis Living	85	1	16.4%	-1.7% plus £500,000	-0.9% plus £500,000	£500,000	14.7% plus £500,000	15.5% plus £500,000	16.4% plus £500,000
Halo Leisure	83		14.3%	£116,000	£120,300	£124,800	14.3% plus £116,000	14.3% plus £120,300	14.3% plus £124,800
Herefordshire Housing Limited	33	1	13.9%	£107,880	£107,230	£106,530	13.9% plus £107,880	13.9% plus £107,230	13.9% plus £106,530
Hoople Limited	313		15.2%	Nil	Nil	Nil	15.2%	15.2%	15.2%
Malvern Hills Conservators	14		18.2%	£66,900	£69,400	£72,000	18.2% plus £66,900	18.2% plus £69,400	18.2% plus £72,000
Malvern Hills OEC	88		14.8%	(£600)	(£600)	(£600)	14.8% less £600	14.8% less £600	14.8% less £600
Sports Partnerhip	217	1	18.5%	£1,370	£1,410	£1,440	18.5% plus £1,370	18.5% plus £1,410	18.5% plus £1,440
The Community Housing Group	38	2	15.7%	£570,720	£591,860	£613,790	15.7% plus £570,720	15.7% plus £591,860	15.7% plus £613,790
Worcester Community Trust	207		15.0%	(£7,600)	(£7,900)	(£8,200)	15.0% less £7,600	15.0% less £7,900	15.0% less £8,200
Wychavon Leisure Community	82		17.5%	£65,500	£67,900	£70,400	17.5% plus £65,500	17.5% plus £67,900	17.5% plus £70,400



Notes:

1. Cash payments in respect of £ lump sums are payable by 30 April 2017. These amounts have been reduced to reflect this early payment;
2. Cash payments in respect of £ lump sums are payable by 30 April of the year in which they are due. These amounts have been reduced to reflect this early payment;
3. With the agreement of the Administering Authority these employers have agreed to pay their % employer contributions in the April 2017. The cash amounts payable will be reduced in return for this early payment as follows. Payments made in the April of the certified year will be reduced in return for this early payment as follows:
  - Payments made in the April of the certified year will be reduced by 2.12% (i.e. the above amounts will be multiplied by 0.9788)
  - 2018/19 payments made in April 2017 will be reduced by 6.6% (i.e. the above amounts will be multiplied by 0.934)
  - 2019/20 payments made in April 2017 will be reduced by 11.2% (i.e. the above amounts will be multiplied by 0.888)

For these cases the employer will need to estimate in advance the pensionable pay for the entire period, and a balancing adjustment to reflect the actual pensionable pay over the period would be made at the end of the period (no later than 19th April or 22nd April as appropriate following the year-end);

4. With the agreement of the Administering Authority other employers may also opt to pay any other element of their employer contributions early. The cash amounts payable will be reduced in return for this early payment as follows:
  - Payments made in the April of the certified year will be reduced by 2.12% (i.e. the above amounts will be multiplied by 0.9788)
  - Payment of two subsequent years' contributions in the April of the first year will be reduced by 2.12% (i.e. the above amounts will be multiplied by 0.9788) of the first year's contribution and 6.6% (i.e. the above amounts will be multiplied by 0.934) of the second year's contribution;
  - Payment of three subsequent years' contributions in the April of the first year will be reduced by 2.12% (i.e. the above amounts will be multiplied by 0.9788) of the first year's contribution, 6.6% (i.e. the above amounts will be multiplied by 0.934) of the second year's contribution and 11.2% (i.e. the above amounts will be multiplied by 0.888) of the third year's contribution.

Where an employer pays some of its % contributions early, it will need to estimate in advance the pensionable pay for the entire period, and a balancing adjustment to reflect the actual pensionable pay over the period would be made at the end of the period (no later than 19th April or 22nd April as appropriate following the year end).

# I

## GLOSSARY

**Actuarial Valuation:** an investigation by an actuary into the ability of the Fund to meet its liabilities. For the LGPS the Fund Actuary will assess the funding level of each participating employer and agree contribution rates with the administering authority to fund the cost of new benefits and make good any existing deficits as set out in the separate Funding Strategy Statement.

**Best Estimate Assumption:** an assumption where the outcome has a 50/50 chance of being achieved.

**Bonds:** loans made to an issuer (often a government or a company) which undertakes to repay the loan at an agreed later date. The term refers generically to corporate bonds or government bonds (gilts).

**Career Average Revalued Earnings Scheme (CARE):** with effect from 1 April 2014, benefits accrued by members in the LGPS take the form of CARE benefits. Every year members will accrue a pension benefit equivalent to 1/49th of their pensionable pay in that year. Each annual pension accrued receives inflationary increases (in line with the annual change in the Consumer Prices Index) over the period to retirement.

**Corporate Bond Basis:** an approach where the discount rate used to assess the liabilities is determined based on the market yields of high quality corporate bond investments (usually at least AA rated) based on the appropriate duration of the liabilities being assessed. This is usually adopted when an employer is exiting the Fund.

**CPI:** acronym standing for “Consumer Prices Index”. CPI is a measure of inflation with a basket of goods that is assessed on an annual basis. The reference goods and services differs from those of RPI. These goods are expected to provide lower, less volatile inflation increases. Pension increases in the LGPS are linked to the annual change in CPI.

**Deficit:** the extent to which the value of the Fund’s past service liabilities exceeds the value of the Fund’s assets.

**Discount Rate:** the rate of interest used to convert a cash amount e.g. future benefit payments occurring in the future to a present value.

**Employer Covenant:** the degree to which an employer participating in an occupational pension scheme is willing and able to meet the funding requirements of the scheme.

**Employer's Future Service Contribution Rate:** the contribution rate payable by an employer, expressed as a % of pensionable pay, as being sufficient to meet the cost of new benefits being accrued by active members in the future. The cost will be net of employee contributions and will include an allowance for the expected level of administrative expenses.

**Equities:** shares in a company which are bought and sold on a stock exchange.

**Solvency/Funding Level:** the ratio of the value of the Fund's assets and the value of the Fund's liabilities expressed as a percentage.

**Funding Strategy Statement:** This is a key governance document that outlines how the administering authority will manage employer's contributions to the Fund.

**Solvency Funding Target:** an assessment of the present value of benefits to be paid in the future. The desired funding target is to achieve a solvency level of a 100% i.e. assets equal to the past service liabilities assessed on the ongoing concern basis.

**Investment Strategy:** the long-term distribution of assets among various asset classes that takes into account the Funds objectives and attitude to risk.

**Past Service Liabilities:** this is the present value of the benefits accrued by members up to the valuation date. It is assessed based on a set of assumptions agreed between the Administering Authority and the Actuary.

**Prepayment:** the payment by employers of contributions to the Fund earlier than that certified by the Actuary. The amount paid will be reduced compared to the certified amount to reflect the early payment.

**Present Value:** the value of projected benefit payments, discounted back to the valuation date.

**Primary rate of the employers' contribution:** the contribution rate required to meet the cost of the future accrual of benefits including ancillary, death in service and ill health benefits together with administration costs. It is expressed as a percentage of pensionable pay, ignoring any past service surplus or deficit, but allowing for any employer-specific circumstances, such as its membership profile, the funding strategy adopted for that employer, the actuarial method used and/or the employer's covenant. The Primary rate for the whole fund is the weighted average (by payroll) of the individual employers' Primary rates.

**Prudent Assumption:** an assumption where the outcome has a greater than 50/50 chance of being achieved i.e. the outcome is more likely to be overstated than understated. Legislation requires the assumptions adopted for an actuarial valuation to be prudent.

**Real Return or Real Discount Rate:** a rate of return or discount rate net of CPI inflation.

**Recovery Plan:** a strategy by which an employer will make up a funding deficit over a specified period of time ("the recovery period", as set out in the Funding Strategy Statement.

**Secondary rate of the employers' contribution:** an adjustment to the Primary rate to reflect any past service deficit or surplus, to arrive at the rate each employer is required to pay. The Secondary rate may be expressed as a percentage adjustment to the Primary rate, and/or a cash adjustment in each of the three years beginning 1 April in the year following that in which the valuation date falls. The Secondary rate is specified in the rates and adjustments certificate. For any employer, the rate they are actually required to pay is the sum of the Primary and Secondary rates. Secondary rates for the whole fund in each of the three years shall also be disclosed. These will be calculated as the weighted average based on the whole fund payroll in respect of percentage rates and as a total amount in respect of cash adjustments.

**50/50 Scheme:** in the LGPS, active members are given the option of accruing a lower benefit in the 50/50 Scheme, in return for paying a lower level of contribution.

**MERCER LIMITED**

No 4 St Paul's Square,  
Old Hall Street,  
Liverpool,  
L3 9SJ  
[www.mercer.com](http://www.mercer.com)

Mercer Limited is authorised and regulated by the Financial Conduct Authority  
Registered in England No. 984275 Registered Office: 1 Tower Place West, Tower Place, London, EC3R 5BU