

# **Pension Fund Committee**

## **TABLED DOCUMENTS**

**DATE:                                      Wednesday 9 March 2016**

**7.      INFORMATION REPORT - ACTUARIAL VALUATION 2016 (Pages 3 - 4)**

Report of the Director of Finance.

**16.     ANY OTHER URGENT BUSINESS (Pages 5 - 18)**

Options for Liability Driven Investments.

Oral Report of the Director of Finance.

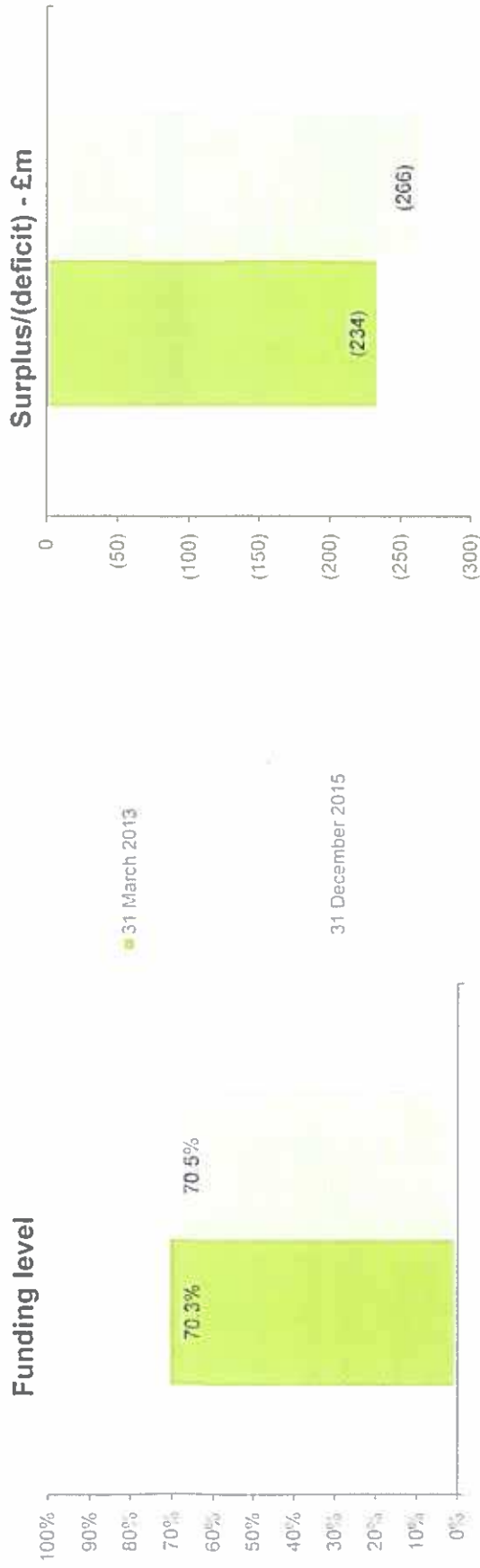
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## London Borough of Harrow Pension Fund 2016 valuation timetable

	Event	Responsibility	Proposed timescale
<b>Meetings</b>	<b>Pensions Committee meetings</b>		
	M1. Valuation training	Actuary/Officers/PC	09 March 2016
	M2. No Actuary attendance	Officers/PC	21 June 2016
	M3. Presentation of draft results and discussion on assumptions	Actuary/Officers/PC	6 September 2016
	M4. Actuary attendance to be confirmed	Actuary/Officers/PC	22 November 2016
	M5. Present final results	Actuary/Officers/PC	Q1 2017
<b>Funding Strategy</b>	<b>Funding Strategy</b>		
	S1. First draft FSS	Actuary	Autumn 2016
	S2. Approve FSS	Actuary/Officers/PC	December 2016
	S3. Formal employer consultation	Actuary/Officers	TBC
	S4. Review other fund policies	Actuary/Officers	January/February 2017
	S4. Sign off FSS	Actuary/Officers/PC	March 2017
<b>Valuation process</b>	<b>Valuation process</b>		
	V1. Valuation assumption discussions	Actuary/officers/PC	Ongoing
	V2. Employers submit annual returns to Fund	Employers	TBC
	V3. Submission of membership data to Actuary	Officers	31 May 2016
	V4. Clean data sign off	Actuary	21 June 2016
	V5. Provision of whole fund results to officers	Actuary	19 July 2016
	V6. Provision of individual employer results to officers	Actuary	16 August 2016
	V7. Provision of funding metrics to Scheme Advisory Board	Actuary	30 September 2016
	V8. Sign off	Actuary	31 March 2017
<b>Reporting</b>	<b>Valuation reporting</b>		
	R8. First draft of final report	Actuary	January/February 2017
	R9. Sign off final report and R&A	Actuary	31 March 2017

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# Funding update as at 31 December 2015 London Borough of Harrow Fund



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## Summary

This funding update is provided to illustrate the estimated development of the funding position from 31 March 2013 to 31 December 2015, for the London Borough of Harrow Fund ("the Fund"). It is addressed to London Borough of Harrow in its capacity as the Administering Authority of the London Borough of Harrow Fund and has been prepared in my capacity as your actuarial adviser.

The funding level at the latest formal valuation was 70.3%. As at 31 December 2015 the funding level has increased to 70.5%.

This report has been produced exclusively for the Administering Authority. This report must not be copied to any third party without our prior written consent.

This report looks at the whole fund position and does not allow for the circumstances of individual employers. The results for individual employers can be quite different to the fund as a whole depending on their own experience and the profile of their liabilities. Differences in the relationship between the ratio of accrued liabilities and the payroll can have a large influence on changes in contributions.

Gemma Sefton FFA  
Fund Actuary

### What's happened since the last update – ongoing funding basis

	Surplus/deficit - £m
Surplus/(deficit) as at 31 December 2014	(260)
Interest on surplus/deficit	(14)
Excess return on assets	(14)
Change in yields & inflation	22
Contributions (less benefits accruing)	0
Surplus/(deficit) as at 31 December 2015	(266)
	(300)
	50

### Differences between this funding update and a full actuarial valuation

The accuracy of this type of funding update calculation is expected to decline over time as the period since the last valuation increases. This is because this funding update does not allow for changes in individual members' data since the last valuation.

Details of the approach used in this funding update are given in the appendix.

The figures in tables throughout this document may not add up due to rounding.

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## Estimated financial position at 31 December 2015

### Ongoing funding basis

£m	31 Mar 2013	31 Dec 2014	31 Dec 2015
Assets	552	635	635
Liabilities	786	895	901
Surplus/(deficit)	(234)	(260)	(266)
Funding level	70.3%	71.0%	70.5%

### Gilts funding basis

£m	31 Mar 2013	31 Dec 2014	31 Dec 2015
Assets	552	635	635
Liabilities	1,051	1,205	1,209
Surplus/(deficit)	(499)	(571)	(574)
Funding level	52.5%	52.7%	52.5%

### Basis summary

	31 Mar 2013	31 Dec 2015
Pre retirement discount rate		
Nominal	4.6%	4.2%
Real	1.3%	0.9%
Post retirement discount rate		
Nominal	4.6%	4.2%
Real	1.3%	0.9%
Salary increase rate	3.8%	3.8%

The assumptions underlying the funding bases are set out in the Funding Strategy Statement. They are those set for the 2013 valuation of the Fund updated for market conditions as at the calculation date.

### Market indicators

	31 Mar 2013	31 Dec 2015
Market yields (p.a.)		
Fixed interest gilts	3.02%	2.57%
Index linked gilts	-0.27%	-0.71%
Implied inflation (RPI)	3.30%	3.30%
Implied inflation (CPI)	2.50%	2.50%
AA corporate bonds	4.03%	3.65%
AOA	1.60%	1.60%
Price indices		
FTSE All Share	3,381	3,444
FTSE 100	5,412	6,242





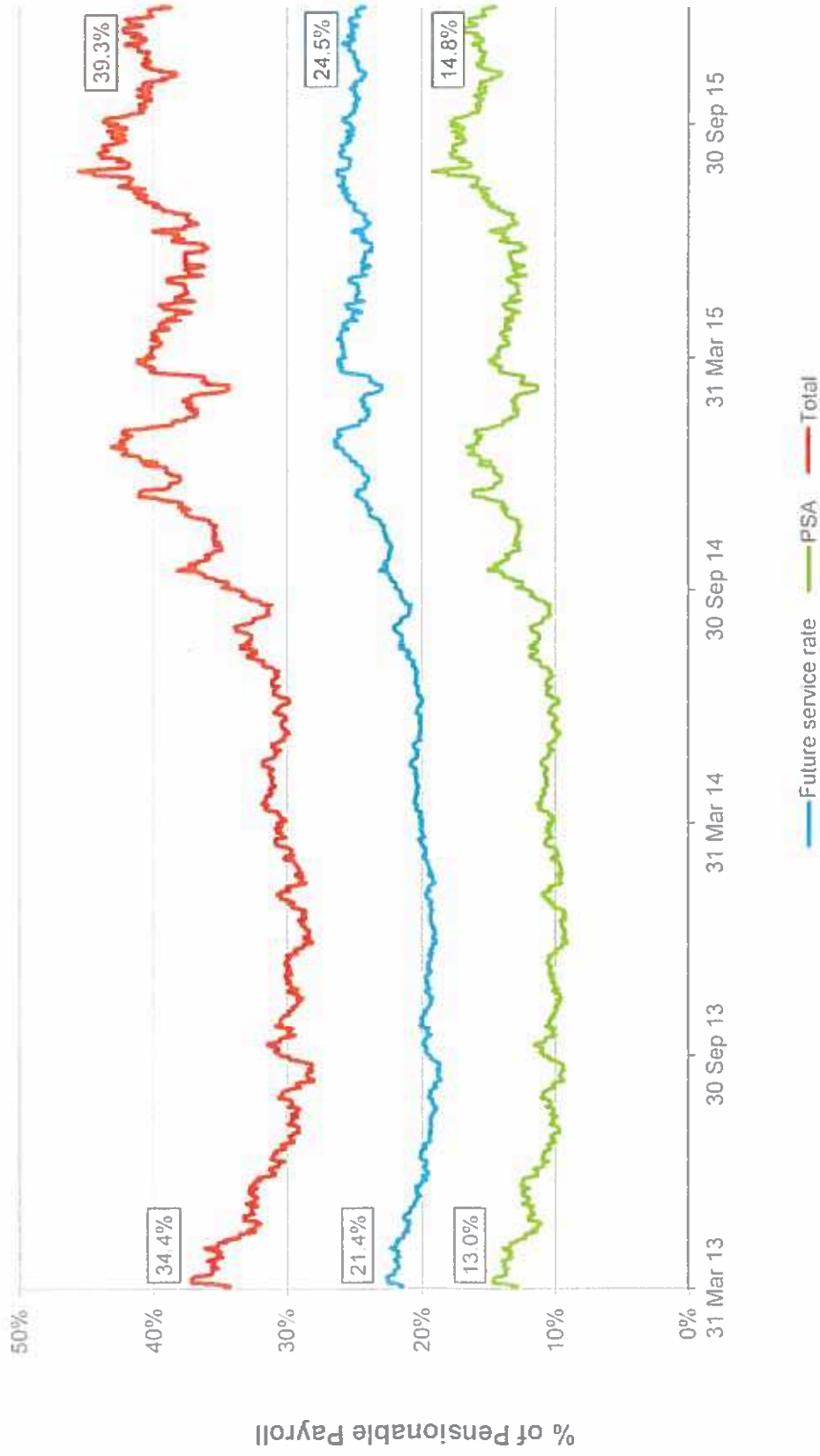
### Change in funding level since last valuation





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### Change in contribution rate





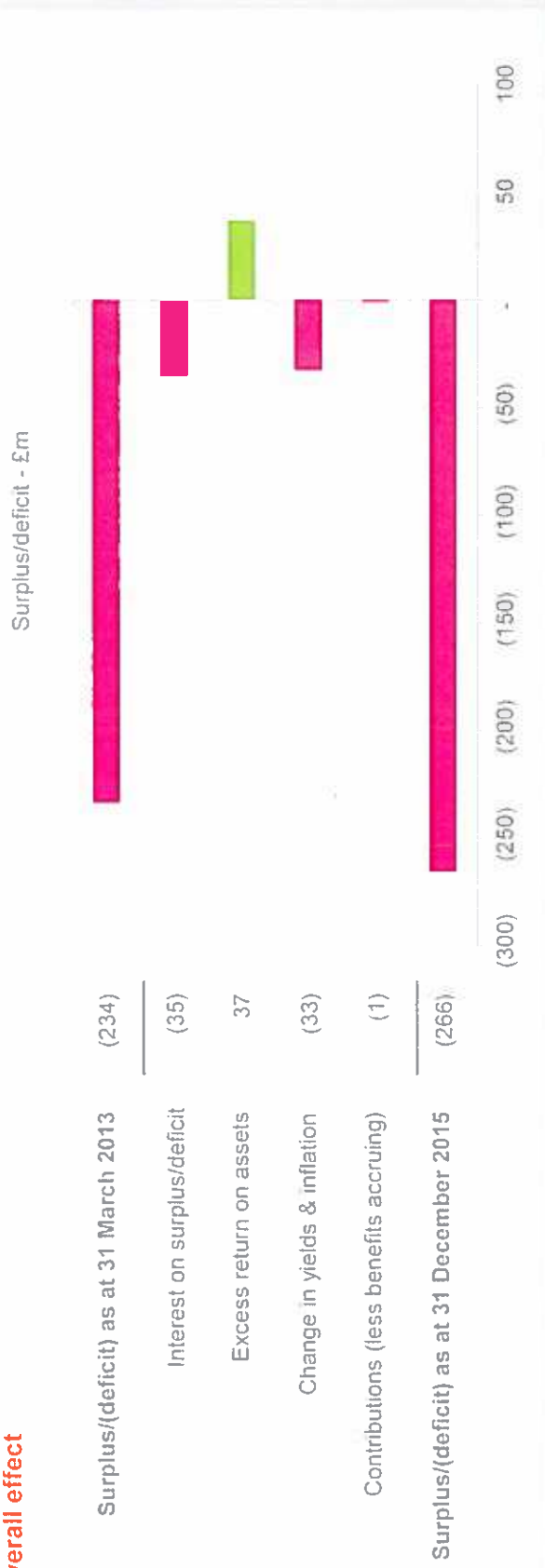
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## What's happened since last valuation? – ongoing funding basis

Assets	£m
Asset value as at 31 March 2013	552
Contributions paid in	61
Benefit payments	(87)
Expected return on assets	72
Excess return on assets	37
Asset value as at 31 December 2015	635

Liabilities	£m
Liability value as at 31 March 2013	786
Cost of benefits accruing	63
Interest on liabilities	107
Change in yields & inflation	33
Benefit payments	(87)
Liability value as at 31 December 2015	901

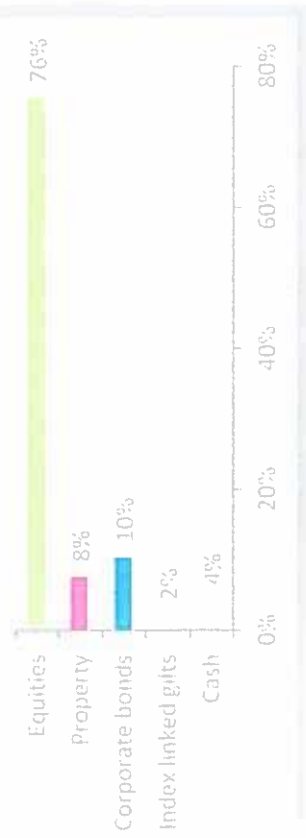
### Overall effect



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## What caused your assets to change?

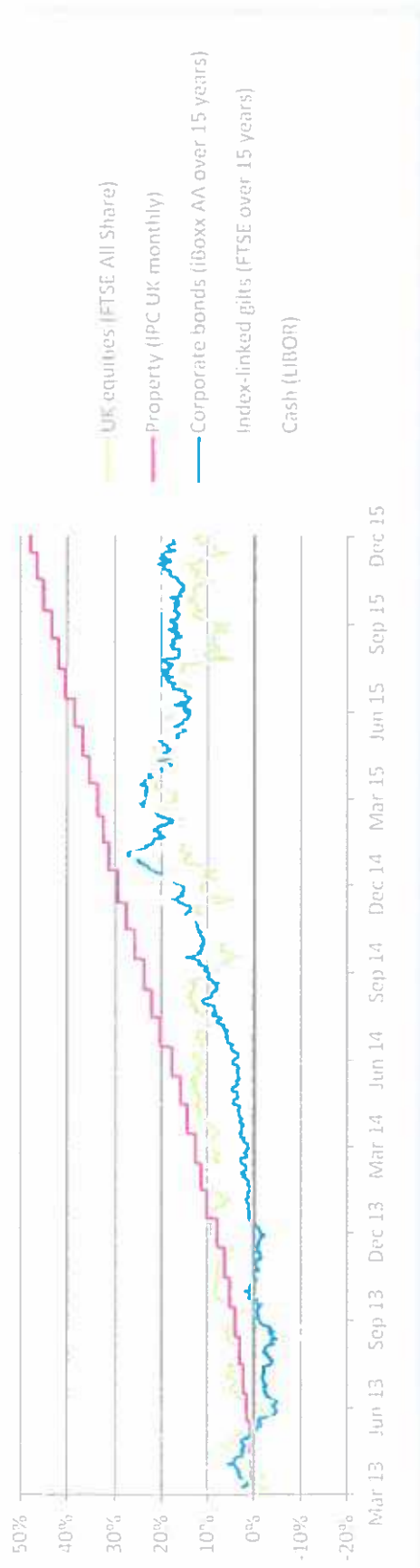
Allocation at valuation date



Allocation at 31 December 2015



Sterling total returns of major asset classes



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## Sensitivity matrix – ongoing funding basis

		Better outcomes									
3.17	57.0%	63.7%	70.5%	77.3%	84.1%	90.8%	97.6%				
	(350)	(295)	(240)	(185)	(129)	(74)	(19)				
2.97	55.3%	61.9%	68.4%	75.0%	81.6%	88.1%	94.7%				
	(375)	(320)	(265)	(210)	(155)	(100)	(45)				
2.77	53.7%	60.1%	66.4%	72.7%	79.1%	85.4%	91.7%				
	(402)	(347)	(292)	(237)	(182)	(127)	(72)				
2.57	52.2%	58.3%	64.4%	70.5%	76.6%	82.7%	88.8%				
	(431)	(376)	(321)	(266)	(211)	(156)	(101)				
2.37	50.6%	56.5%	62.4%	68.3%	74.2%	80.1%	86.0%				
	(461)	(406)	(351)	(296)	(241)	(186)	(131)				
2.17	49.0%	54.7%	60.4%	66.1%	71.8%	77.5%	83.2%				
	(494)	(438)	(383)	(328)	(273)	(218)	(163)				
1.97	47.5%	53.0%	58.5%	63.9%	69.4%	74.9%	80.4%				
	(528)	(473)	(418)	(363)	(307)	(252)	(197)				
	4,370	4,994	5,618	6,242	6,867	7,491	8,115				
Equity level (using FTSE 100 Price Index as a proxy)											

70.5%

Funding level

(266)

Surplus/(deficit) – £m

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## Appendix: Scope, methodology, reliances, limitations and market data

### Scope

This funding update is provided to London Borough of Harrow as the Administering Authority of the London Borough of Harrow Fund to illustrate the funding position as at 31 December 2015. It should not be used for any other purpose. It should not be released or otherwise disclosed to any third party except with Hymans Robertson LLP's prior written consent, in which case it is to be released in its entirety. Hymans Robertson LLP accepts no liability to any third party unless we have expressly accepted such liability in writing.

### Compliance with professional standards

The method and assumptions used to calculate the updated funding position are consistent with those used in the latest formal actuarial valuation, although the financial assumptions have been updated to reflect known changes in market conditions. As such, the advice in this report is consistent with that provided for the last valuation, as set out in the:

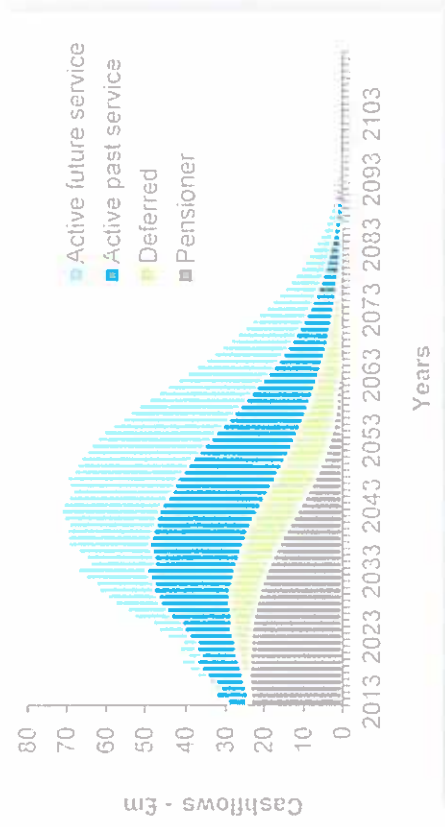
- Valuation Assumptions Briefing Note
- Funding Strategy Statement
- Valuation Report
- Rates and Adjustments Certificate

This update therefore complies with the following Technical Actuarial Standards (TASs):

- Reporting ("TAS R") - Data ("TAS D")
- Modelling ("TAS M") - Pensions TAS

### How liabilities are calculated

- The future benefits that are payable from the Fund ("cash-flows") were calculated on a specific set of assumptions at the last valuation date.
- These cash-flows (on the ongoing funding basis) are shown below.
- These cash-flows were adjusted using available financial and Fund information to produce estimated cash-flows at post valuation dates.
- The specific information used for this update is set out on the next page.
- Market information is used to produce discount rates at these dates.
- The estimated cash-flows are discounted to produce the estimated liability value at a specific date.



### How assets are calculated

Assets are projected from the valuation date allowing for actual or estimated Fund cash-flows, actual quarterly returns (where available) and daily benchmark indices.



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**The update allows for:**

- 1 Movements in the value of the assets as measured by index returns and data from the administering authority where available.
- 2 Movements in liabilities as a result of changes in yields and hence inflation and discount rate assumptions.
- 3 Estimated cash-flows (contributions and benefit payments).
- 4 Expected accrual of benefits for employee members accrued since the last valuation (based on projected salary roll).
- 5 Demographic experience in line with assumptions.
- 6 Variations in liabilities arising from the changes in RPI since the valuation date differing relative to assumptions.
- 7 Benefit accrual in line with the 2014 scheme.

**The update does not allow for:**

- 1 Asset allocations differing from those assumed (other than when asset data is recalibrated based on available information).
- 2 The asset values as at the date of this report have not been based on audited Fund accounts.
- 3 Variations in liabilities arising from salary rises differing relative to assumptions.
- 4 Differences between estimated and actual salary roll of employees.
- 5 Variation between actual and expected demographic experience (e.g. early retirement or mortality).

**Membership data**

My calculations are based on the membership data provided for the most recent actuarial valuation. Details on the quality of this data and a data summary can be found in the last formal actuarial valuation report.

**Limitations of this model**

In the short term, the typical main contributors to funding position volatility are movements in the value of assets held, liability changes due to yield movements, benefit changes and deficit contributions to the Fund.

The accuracy of this type of funding update calculation is expected to decline over time. Differences between the position shown in this report and the position which a valuation would show can be significant; particularly if there have been volatile financial markets or material membership changes (these are more likely to occur in smaller Funds). It is not possible to fully assess the accuracy of this update without carrying out a full actuarial valuation.

Liability calculations are performed on the valuation date, the funding update date, anniversaries of the valuation date and each month-end in between. Interpolation is used for other dates shown in graphs. Some asset classes are not easily tracked by the benchmark indices used in this model which can lead to significant differences between actual and projected asset values.

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**Indices used to update projected asset values**

Some of the following indices have been used to update projected asset values in this funding update.

- FTSE 100
- FTSE 250
- FTSE Small Cap
- FTSE All Share
- FTSE All World Series North America (£)
- FTSE All World Series Japan (£)
- FTSE All World Series Developed Europe (£)
- FTSE All World Series Developed Asia Pacific (£)
- FTSE All World Series All World Developed Ex UK (£)
- FTSE All World Series All World Ex UK (£)
- FTSE All World Series All Emerging (£)
- UK Government Fixed Interest Gilts (Over 15 Years)
- UK Government Index-Linked Gilts (Over 5 Years)
- UK Government Index-Linked Gilts (Over 15 Years)
- iBoxx A rated UK Corporate Bonds (Over 15 Years)
- iBoxx AA rated UK Corporate Bonds (Over 15 Years)
- iBoxx AAA rated UK Corporate Bonds (Over 15 Years)
- iBoxx All Investment Grades rated UK Corporate Bonds (Over 15 Years)
- IPD Property
- Cash Indices LIBOR 1 Month

The indices are a standard list and are not necessarily the same indices that managers have been asked to track or beat. All indices used to estimate projected asset values are total return indices. However, the market indicators quoted in this report are price indices, as these are more widely recognised.

**Market information used to update liability values**

Some of the following market information has been used to update liabilities values in this funding update.

- FTSE Actuaries UK Fixed Interest Gilts Yields (Over 15 Years)
- FTSE Actuaries Index-Linked Gilts (3% Inflation) Yields (Over 15 Years)
- iBoxx AA rated UK Corporate Bond Yields (Over 15 Years)

Note: Market yields displayed in the market indicators table are on a semi-annual basis.