Pension Fund Investment Sub-Committee

12 December 2016

Agenda

The Pension Fund Investment Sub-Committee will meet in **Committee Room 2**, **Shire Hall**, **Warwick** on **12 December 2016** at **10.00 a.m.**

1. General

(1) Apologies

(2) Members' Disclosures of Pecuniary and Non-Pecuniary Interests.

Members are required to register their disclosable pecuniary interests within 28 days of their election or appointment to the Council. A member attending a meeting where a matter arises in which s/he has a disclosable pecuniary interest must (unless s/he has a dispensation):

- Declare the interest if s/he has not already registered it
- Not participate in any discussion or vote
- Must leave the meeting room until the matter has been dealt with (Standing Order 43).
- Give written notice of any unregistered interest to the Monitoring Officer within 28 days of the meeting

Non-pecuniary interests must still be declared in accordance with the Code of Conduct. These should be declared at the commencement of the meeting.

(3) Minutes of the previous meeting held on 12 September 2016

2. Investment Performance

3. The Stewardship Code

4. The 2016 Actuarial Valuation

5. Pooling Update

6. Presentation from Markham Rae

7. Any other items

Which the Chair decides are urgent.

8. Reports Containing Confidential or Exempt Information

To consider passing the following resolution:

'That members of the public be excluded from the meeting for the items mentioned below on the grounds that their presence would involve the disclosure of exempt information as defined in paragraph 3 of Schedule 12A of Part 1 of the Local Government Act 1972'.

9. Exempt minutes of the meeting held on 12 September 2016

10. Investment Update

JIM GRAHAM
Chief Executive
Shire Hall
Warwick

Membership of the Pension Fund Investment Sub-Committee

Councillors John Appleton, Bill Gifford (Vice Chair), Brian Moss, Bob Stevens (Chair) and Alan Webb

For general enquiries please contact Ben Patel-Sadler:
Tel: 01926 736118
Email: benpatelsadler@warwickshire.gov.uk

Minutes of the Pension Fund Investment Sub-Committee meeting held on 12 September 2016

Present:

Members
Councillors John Appleton, Bill Gifford (Vice Chair), Brian Moss, Bob Stevens (Chair) and Alan Webb

Officers
Mathew Dawson - Treasury and Pension Fund Manager
Vicki Forrester – Principal Accountant
Andrew Lovegrove - Head of Corporate Financial Services
Ben Patel-Sadler - Democratic Services Officer
Sian Stroud – Senior Solicitor and Team Leader

Invitees
Robert Bilton – Hymans Robertson
Peter Jones – Independent Investment Adviser
Paul Potter – Hymans Robertson
Karen Shackleton – Independent Investment Adviser
Neil Turner - Schroders
Richard Warden – Hymans Robertson

Observers
None

No members of the public attended.

1. General

(1) Apologies for absence

None

(2) Members Disclosures of Pecuniary and Non-Pecuniary Interests

None

(3) Minutes of the previous meeting held on 13 June 2016

The minutes of the meeting held on 13 June 2016 were agreed as a true and correct record and were signed by the Chair.

2. Investment Performance

Mathew Dawson - Treasury and Pension Fund Manager introduced the report and informed the Committee that the overall value of the fund had seen an increase of 4.52% on the previous quarter.

Members noted that the UK Equity Asset Class was in an overweight position – the Overseas and Fundamental Global Equity Asset Classes were slightly underweight.
Members noted that the overall performance of Threadneedle (Fund Manager) was good. Mathew Dawson informed the Committee that the performance of Threadneedle had dipped during the previous quarter due to the financial markets' initial reaction to Brexit. However, members noted that Threadneedle were performing well overall and were offering good long-term value in relation to investment returns.
Members expressed a view that the performance indicators showed that overall, the Council's long-term investments remained protected.
The Committee requested further information with regards to any investments which the Council had in the US property market.

Resolved

The Sub-Committee noted the fund value and investment performance for the first quarter in 2016-17 to 30 June 2016.

3. Fund Rebalancing

Karen Shackleton – Independent Investment Adviser introduced the report and informed the Committee that the overall aim of the fund rebalancing process was to ensure that the fund remained balanced in the Liquid Asset Class. Members noted that there had been a temporary suspension around the rebalancing of US equities.
Members noted that Legal and General Investment Management (LGIM) were responsible for optimising fund investments using the 'buy low, sell high' concept. Karen Shackleton informed the Committee that it was important for LGIM to set the band widths narrow enough to capture the 'buy low, sell high' benefit, but wide enough to avoid short term market noise, or volatility, which would result in unnecessary and costly turnover.
The Committee noted that LGIM had been selling down the US fund in order to bring it back to a balanced position – with no US fund now to balance, it was recommended to the Committee by Karen Shackleton to suspend the rebalancing of US equities. The Committee expressed a view that this was a logical step to take – at the present time the US was in a strong economic position overall. There was no need to sell US stocks when LGIM might have to try and purchase them again in the future.

Resolved

The Sub-Committee agreed to suspend the rebalancing of US equities and agreed that the next quarterly rebalancing in September 2016 be reviewed so that market conditions at that time could be taken into account before any rebalancing took place.

4. Brexit Implications

Paul Potter – Hymans Robertson introduced the report and informed the Committee that since the Brexit decision occurred, economic forecasts reflected the view that Brexit had resulted in short term economic costs due to the level of uncertainty created.
Members noted that the sterling currency value had fallen following the Brexit decision and had not yet recovered to pre-Brexit values.
Due to the Pension Fund having a significant number of overseas assets, the overall value of the fund had increased since Brexit occurred due to currency gains on all of its overseas holdings.
Paul Potter informed the Committee that large global businesses and corporations had not been affected by Brexit - building firms and retailers had been hit hardest by the Brexit decision.
Members noted that it was expected that interest rates would remain lower for longer – low bond yields would impact on the liabilities of the Fund.
The Committee noted that all measures taken by the Fund Managers were to protect their long term investors (such as the County Council).
Paul Potter informed the Committee that a clearer financial picture in relation to the Brexit decision would be available towards the end of September.
In relation to the Brexit discussion, the following points were made/noted by the Committee:

- Property values in London were likely to be hit hardest following Brexit.

- Property investments were seen as the most vulnerable following Brexit.

- Overall, the Fund had stood up well following Brexit – however, it would be important to keep a close watch on any significant trends occurring in the financial markets as the implications of Brexit become clearer over the coming months.

Resolved

The Sub-Committee noted the report.

5. Actuarial Valuation 2016

Robert Bilton and Richard Warden – Hymans Robertson circulated a 2016 progress report in relation to the 2016 Actuarial Valuation.
The Committee noted that a decision was taken at the June 2016 meeting to continue a fund modelling exercise which would stabilise employer contribution rates for large tax-backed employers for the 2016 actuarial valuation. Members noted that since the June 2016 meeting, the actuary had requested from officers their views on the salary growth assumptions that should be used in the calculations that underpin the actuarial valuations results.
When considering the presentation and the associated 2016 progress report, the following points were noted by the Committee:

- Robert Bilton and Richard Warden wished to place on record their thanks to all Council staff who had worked to ensure that they were provided with the up to date membership data.

- The draft funding strategies would be available for the Sub-Committee to consider in December 2016.

- The Committee were provided with four Asset Outperformance Assumptions and noted that the 1.6% figure was used by the actuary to inform further discussions.

- Members noted that people were now living longer – this placed an increased demand on the Pension Fund.

- It was expected that the current public sector pay restraint would remain in place for another three to four years at least.

- The recommendation from actuary in relation to salary increases was that the weighted average single assumption of RPI would be -0.4%.

- The Committee noted that there had been an increased churn in relation to the membership data – when compared with 2013, 2016 had seen around 6400 new actives (new employees joining the Pension Fund).

- The Pension Fund Deficit had fallen in cash terms.

- Members noted that there had been fewer ill health retirements than expected, fewer early leavers than expected and fewer pensioner deaths than expected – 50:50 take-up was also lower than expected.

- In setting employer contribution rates, the actuary needed to understand employers, to determine their funding target, to determine how long each employer had to reach their target and most importantly how much risk each employer could take to hit their target.

After considering the presentation provided by Hymans Robertson, the Committee requested that the actuary report to the December 2016 meeting with proposals which would move away from the current actuarial model. Examples of this included not using an implied interest rate assumption, using the current RPI figure when determining potential contribution rates and using a market futures approach.

Resolved

The Sub-Committee agreed to note the report and to adopt Scenario 2 from the appendix to the report – this was seen as the most realistic and prudent approach to take.

6. Any other items

Councillor Bob Stevens (Chair) informed the Committee that the pooling arrangements with Border to Coast were progressing slowly – the Chair would keep the Committee informed when further developments were made.

7. Reports Containing Confidential or Exempt Information

To consider passing the following resolution:

‘That members of the public be excluded from the meeting for the items mentioned below on the grounds that their presence would involve the disclosure of exempt information as defined in paragraph 3 of Schedule 12A of Part 1 of the Local Government Act 1972’

8. Exempt Minutes of the meeting held on 13 June 2016

The exempt minutes of the meeting held on 13 June 2016 were agreed as true and correct records to be signed by the Chair.

The meeting rose at 12.10pm

……………………………………….
Chair

Item 2

Pension Fund Investment Sub-Committee

12 December 2016

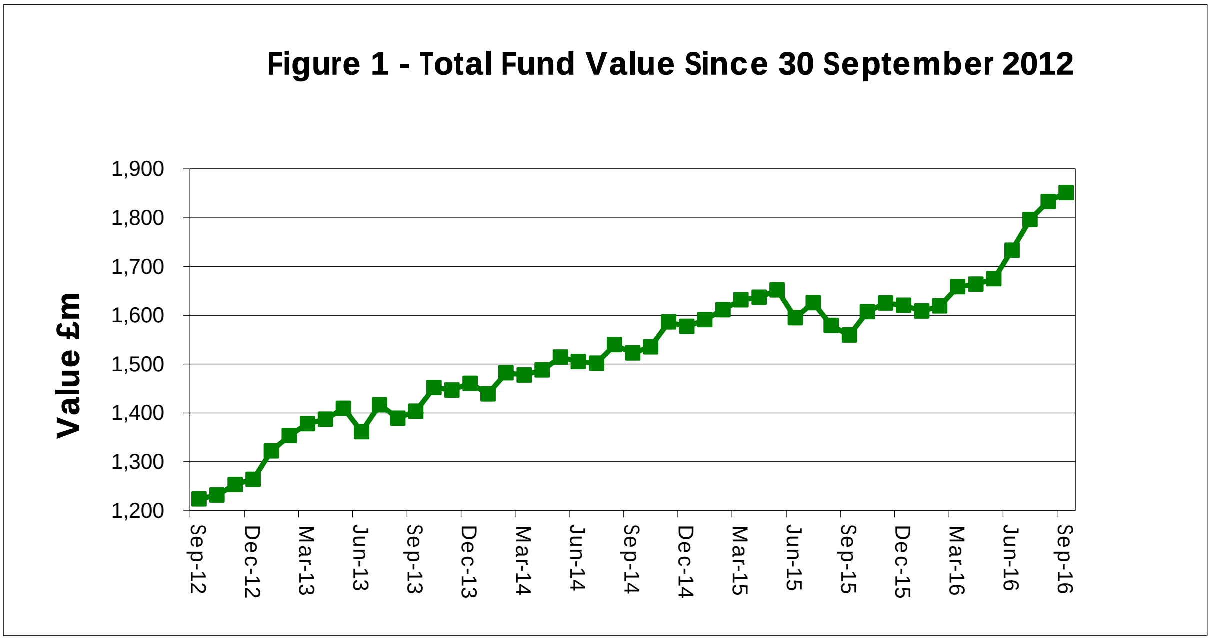
Investment Performance

Recommendation

That the Sub Committee note the fund value and investment performance for the second quarter of 2016/17 to 30 September 2016.

1.0 Fund Value at 30 September 2016

1.1 The fund value was £1,851.5m at 30 September 2016 an increase of 6.88% on the previous quarter as shown in Figure 1.



2.0 Fund Asset Allocation

2.1 The performance of the Fund against its asset class benchmarks for the quarter ending 30 September 2016 is shown in Table 1.

Table 1: Fund Asset Allocation

Asset Class		Q/E Sept 2016 %	Fund policy %	Over/under weight %
Equity		**57.7**	**54.5**	**3.2**
	UK	24.9	23.0	1.9
	Overseas	27.9	26.5	1.4
	Fundamental Global Equity	4.9	5.0	-0.1
Fixed Income		**17.9**	**17.5**	**0.4**
	UK corporate bonds	10.1	10.0	0.1
	UK government bonds	2.3	2.5	-0.2
	UK index linked bonds	5.5	5.0	0.5
Hedge Funds		**4.4**	**5.0**	**-0.6**
Private Equity		**3.3**	**4.0**	**-0.7**
Property		**9.7**	**10.0**	**-0.3**
Absolute Return Bonds		**4.1**	**5.0**	**-0.9**
Infrastructure		**1.5**	**4.0**	**-2.5**
Cash		**1.5**	**0.0**	**1.5**
Total		**100.0**	**100.0**	**0.0**

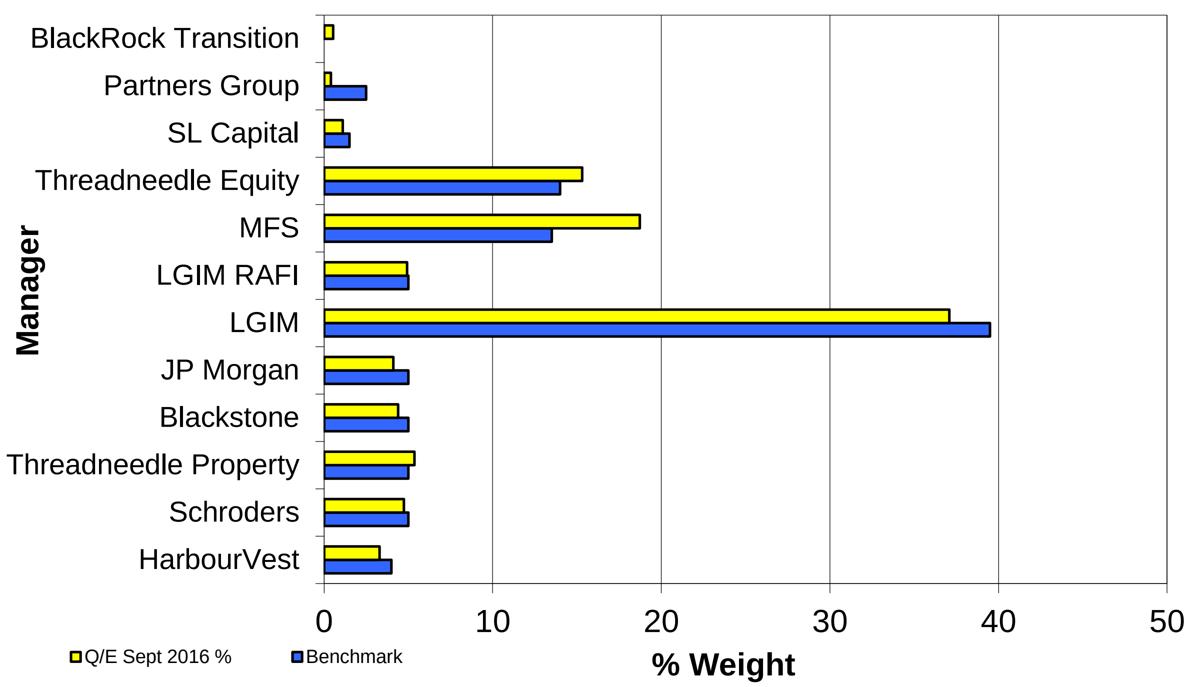
2.2 The fund managers' asset allocation against the benchmark for the quarter ending 30 September 2016 is shown in Table 2.

Table 2: Fund Asset Allocation by Manager

Manager	Q/E Sept 2016 %	Benchmark	Variance
HarbourVest	3.3	4.0	-0.7
Schroders	4.7	5.0	-0.3
Threadneedle Property	5.4	5.0	0.4
Blackstone	4.4	5.0	-0.6
JP Morgan	4.1	5.0	-0.9
LGIM	37.1	39.5	-2.4
LGIM RAFI	4.9	5.0	-0.1
MFS	18.7	13.5	5.2
Threadneedle Equity	15.3	14.0	1.3
SL Capital	1.1	1.5	-0.4
Partners Group	0.4	2.5	-2.1
BlackRock Transition	0.5	0.0	0.5
Total	100.0	100.0	0.0

2.3 Fund asset allocation against each manager is shown in Figure 2.

Figure 2. Manager Allocation - Quarter Ending 30 Sept 2016



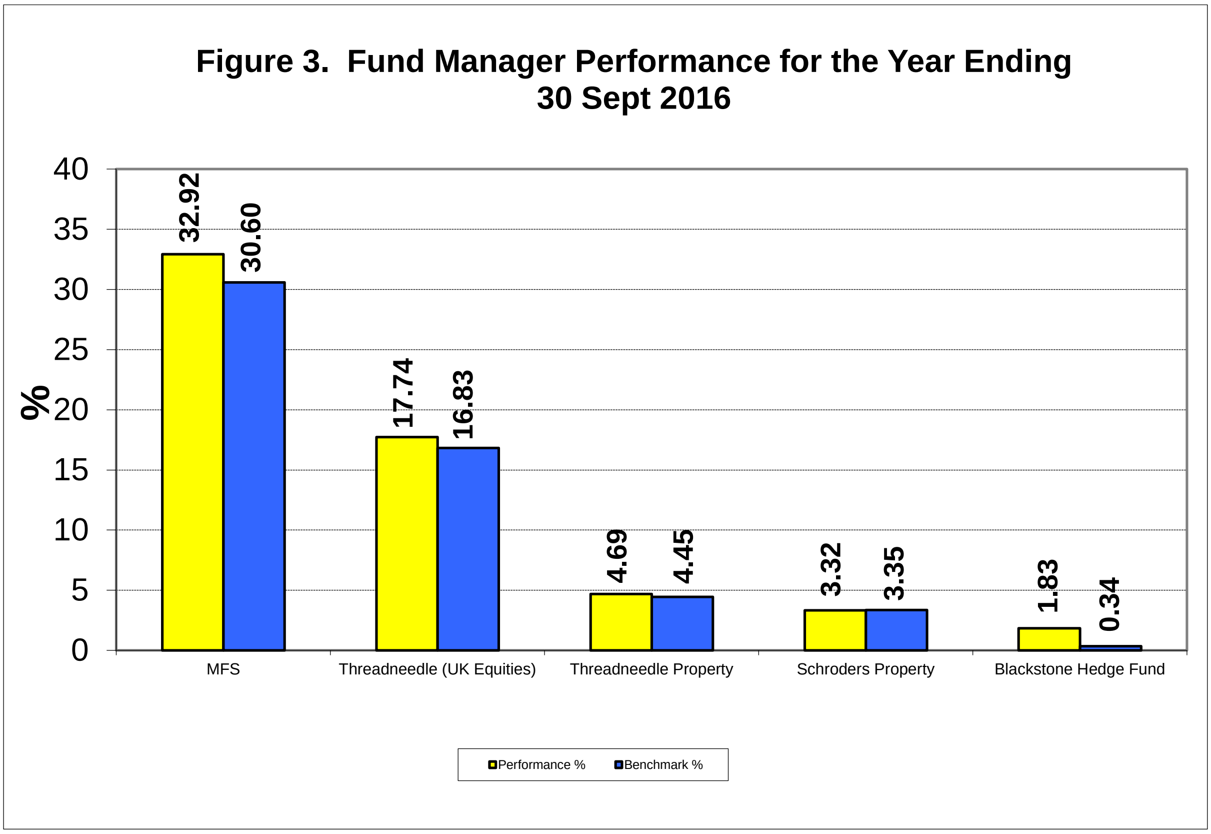
3.0 Fund Performance

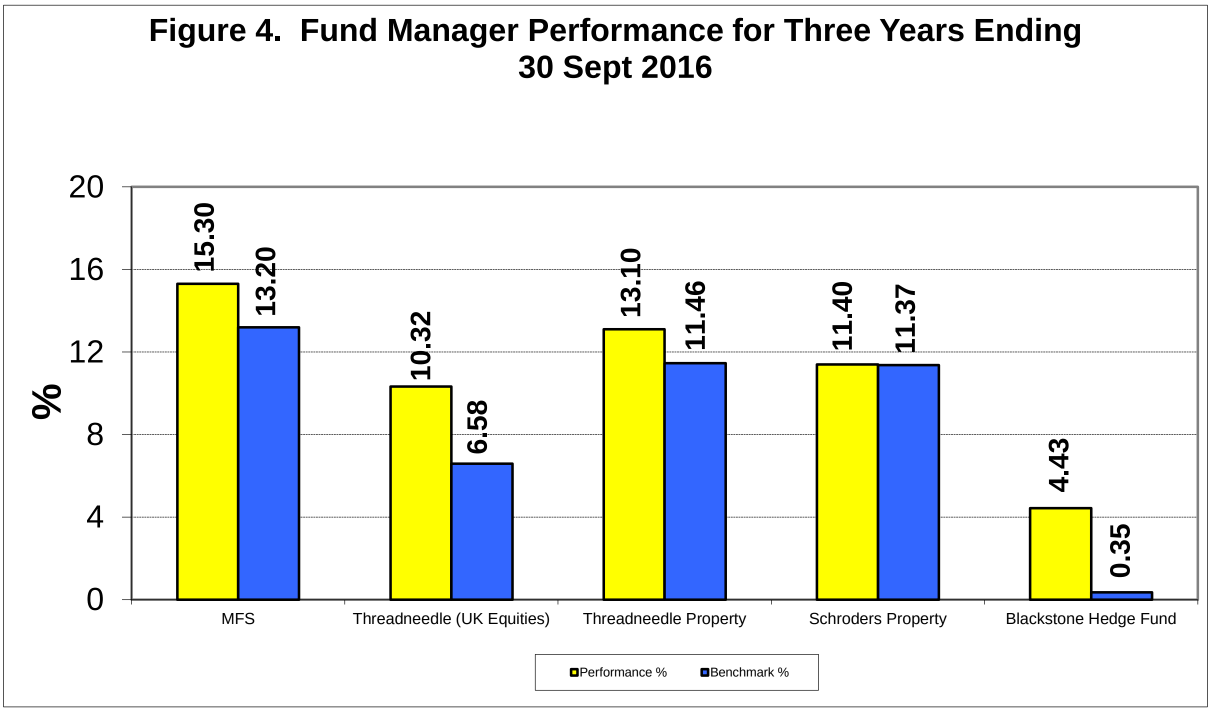
3.1 Overall the fund out-performed its overall benchmark by 0.39%. The performances of managers against their benchmarks for the quarter ending 30 September 2016 were:

Table 3: Performance by Fund Manager

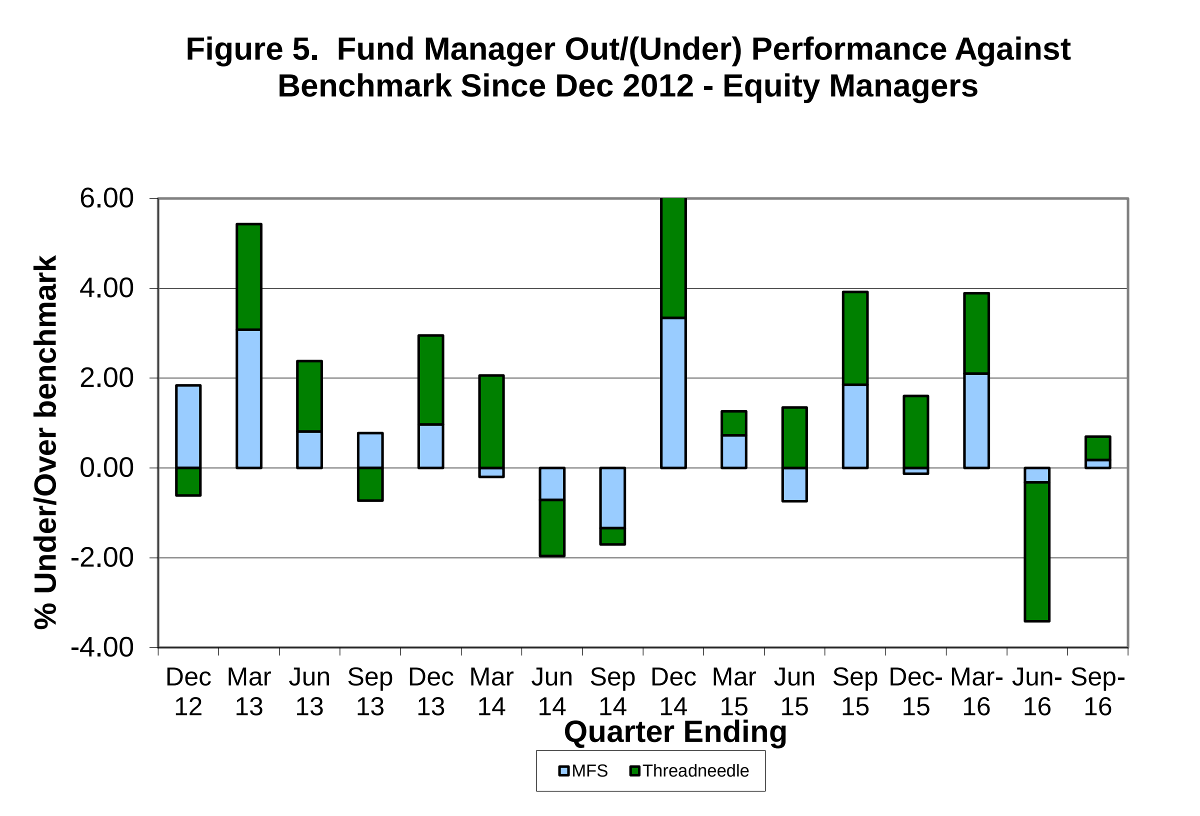
Manager	Benchmark Measure	Q/E Sept 2016 %	Benchmark %	Variance %
MFS		8.56		**0.18**
	Global Equity Benchmark		8.38	
Threadneedle		8.32		**0.52**
	FTSE All-Share		7.80	
Legal and General (Global Equities)		9.23		**0.29**
	LGIM Benchmark		8.94	
Legal and General (Fixed Interest)		6.50		**1.44**
	LGIM Benchmark		5.06	
Threadneedle Property		4.43		**5.22**
	Customised Benchmark		-0.79	
Schroders Property		-0.97		**-0.29**
	Customised Benchmark		-0.68	
Blackstone Hedge		2.12		**2.05**
	Customised Benchmark		0.07	
JP Morgan Strategic Bond		2.42		**2.32**
	Customised Benchmark		0.10	
Total		**6.88**		**0.39**
	WCC Total Fund Benchmark		**6.49**	

3.2 Annualised return for the fund managers to 30 September 2016 is summarised in Figure 3. The three year annualised return is summarised in Figure 4.





3.3 Equity Managers performance against their benchmarks are summarised in Figures 5.



	Name	Contact Information
Report Author	Vicki Forrester, Principal Accountant	01926 412861 vickiforrester@warwickshire.gov.uk
Head of Service	John Betts, Head of Finance	01926 412441 johnbetts@warwickshire.gov.uk
Strategic Director	David Carter, Strategic Director, Resources Group	01926 412564 davidcarter@warwickshire.gov.uk

The report was circulated to the following members prior to publication:

Local Member(s):
Other members

Pension Fund Investment Sub-Committee

12 December 2016

The Stewardship Code

Recommendation

The sub-committee is asked to approve the revised statement at **Appendix A** and make any comments.

1.0 Background

1.1 At the meeting on 18 February 2013 the Sub-Committee approved a Stewardship Code Statement and subsequently became a signatory of the code.

1.2 This statement has now been updated following correspondence with the FRC.

2.0 The Stewardship Code

2.1 Introduced in 2010, The UK Stewardship Code aims to enhance the quality of engagement between institutional investors and companies to help improve long-term returns to shareholders and the efficient exercise of governance responsibilities. The Code set out good practice on engagement with investee companies to which the Financial Reporting Council (FRC) believes institutional investors should aspire and operates on a 'comply or explain' basis. The Financial Services Authority (FSA) requires UK authorised asset managers to report on whether or not they apply the Code.

2.2 In 2016 the FRC contacted code signatories with their intention to re-assess each investor into the following categories:

- Tier 1 – those that meet reporting expectations, including clear and meaningful explanations for non-compliance.
- Tier 2 – those that do not currently meet these expectations.

2.3 The initial assessment from the FRC indicated that the fund would likely be classified as Tier 2 without providing further clarification and additions to the fund's Stewardship Code Statement. Officers engaged with the FRC and subsequently sent a revised draft statement addressing the various issues. The revised statement is at **Appendix A**.

2.4 In November 2016 the FRC stated that the fund will now be assessed as Tier 1.

Background Papers

Stewardship Code Pension Fund Sub-Committee Report 18/02/13

Correspondence from FRC

	Name	**Contact Information**
Report Author	Mathew Dawson, Treasury and Pension Fund Manager	01926 412227 mathewdawson@warwickshire.gov.uk
Head of Service	John Betts, Head of Finance	01926 412441 johnbetts@warwickshire.gov.uk
Strategic Director	David Carter, Strategic Director, Resources Group	01926 412564 davidcarter@warwickshire.gov.uk

The report was circulated to the following members prior to publication:
Local Member(s):
Other members:

Statement of Compliance with UK Stewardship Code – September 2016

Principle 1 – Institutional investors should publicly disclose their policy on how they will discharge their stewardship responsibilities	The fund has a long-standing commitment to responsible share ownership. Stewardship is an integral part of share ownership and therefore of the investment code, and requires the same commitment from fund managers. The practical application of the fund's policy is achieved through a combination of activities including, but not limited to: directly voting our shares, dialogue and liaison with fund managers on key issues and through our membership of the Local Authority Pension Fund Forum (LAPFF). In addition to this Stewardship Code Statement, the fund maintains a Statement of Investment Principles (SIP) which explains investment beliefs in more detail. The fund has a responsibility to its membership to regularly engage with fund managers on their stewardship and it is expected to form part of their presentation(s) to the fund sub-committee. Warwickshire Pension Fund believe that well managed companies provide long term value creation to the fund and that the funds members will be beneficiaries of these companies as strong investment returns improve the funds overall funding level which acts favourably in terms of employer contribution rates.

Principle 2 - Institutional investors should have a robust policy on managing conflicts of interest in relation to stewardship and this policy should be publicly disclosed	The fund encourages fund managers to have effective policies addressing potential conflicts of interest. In respect of conflicts of interest within the fund, Investment Sub-Committee members are required to make declarations of interest prior to each quarterly meeting. External managers are assessed on potential conflicts of interests and their written policies at the evaluation and appointment stage. Subsequent monitoring takes place to by the fund investment consultant and independent advisor protect the funds interests.
Principle 3 - Institutional investors should monitor their investee companies	Day-to-day responsibility for managing our equity holdings is delegated to our appointed fund managers. The fund expects them to monitor companies, intervene where necessary, and report back regularly on activity undertaken. In addition, the fund actively votes all its equity holdings directly and liaises with the fund managers as necessary. The fund has regular meetings with managers and will assess their effectiveness in their monitoring in investee companies as part of formal portfolio reviews either amongst fund officers or the investment sub-committee.

Principle 4 - Institutional investors should establish clear guidelines on where and how they will escalate their stewardship activities	Responsibility for day-to-day interaction with companies is delegated to the fund's fund managers, including the escalation of engagement when necessary. We expect fund managers to disclose their policies and procedures for escalation in their own Stewardship Code statement. However the fund could escalate through LAPFF by supporting a shareholder resolution. The fund's investment managers can escalate through engagement with the company management team, collaboration with other institutional shareholders, filing shareholder resolutions or ultimately selling the holding of company shares. Ultimately the fund manager will seek to add value to their clients through improved company share performance following such escalation.
Principle 5 - Institutional investors should be willing to act collectively with other investors where appropriate	The fund seeks to work collaboratively with like-minded institutional shareholders in order to maximise the influence that it can have on individual companies and would engage it was felt that the fund and the wider Local Government Pension Scheme would benefit. This is achieved in a variety of ways including through our membership of the LAPFF and ad-hoc initiatives proposed by our fund managers or other advisors.

	The funds contact for any such issues is: Mathew Dawson Treasury and Pension Fund Manager Treasury and Pensions Resources Directorate Tel: 01926 412227 Email: mathewdawson@warwickshire.gov.uk
Principle 6 - Institutional investors should have a clear policy on voting and disclosure of voting activity	The fund directly exercises all votes attached to its global equity holdings. The voting policy is a custom policy based on global and local market best practice principles. All voting decisions are made by Fund officers using a variety of inputs including, but not limited to, specialist proxy research. The funds proxy voting system logs all fund voting and uses the funds voting policy to indicate a suggested voting intention that best represents the investment sub-committee's approved policy. A detailed report is also available written by the funds proxy research. The policy is reviewed at least annually by officers in order to take account of regulatory developments. In the event of any

	changes to the policy, a revised policy would be presented to the investment sub-committee for discussion and approval. Fund voting records can be found at: http://www.warwickshire.gov.uk/pensionstatement The fund does take part in stock lending through its global custodian (Bank of New York Mellon). Stock is not routinely recalled in the event of a company meeting. Within segregated mandates, the fund has absolute discretion over whether stock lending is permitted. The Authority permits stock lending in their active mandates. The manager of pooled funds may undertake a certain amount of stock lending on behalf of unitholders in the fund. If a pooled fund engages in this activity, the extent to which it does so is disclosed by the manager. The fund has no direct control over stock lending in pooled funds.
Principle 7 - Institutional investors should report periodically on their stewardship and voting activities.	The fund reports annually on stewardship activity undertaken during the year in the report and accounts and a presentation is given to members who have the opportunity to ask questions about the fund's stewardship activities.

	In the event of significant engagements through any given year the voting activity would be recorded in the fund's annual report and available with voting records on the fund's website for the benefit of the funds membership. External active managers do not vote on behalf of the fund, however fund officers engage with the governance teams at the fund manager for discussions and would be required to submit their voting if requested.

Sir Winfried Bischoff
Chairman

<u>CONFIDENTIAL</u>
Councillor John Appleton
Warwickshire County Council Pension Fund
Shire Hall
Warwick CV34 4RL

June 2016

Dear Councillor Appleton

In December, the FRC announced it would write to all signatories to the Stewardship Code (the Code) with an initial assessment of the quality of their reporting against the Code. I now write to explain further our work on assessing how signatories are implementing the Code and how we wish to encourage better reporting against the Code.

As you know, the Code is voluntary[1] and operates on a comply or explain basis. Every year we assess a sample of the statements by signatories for our 'Developments in Corporate Governance and Stewardship' Report. The research and evidence suggests that the quality and quantity of monitoring and engagement has improved; nevertheless reporting continues to be inconsistent across the market. The FRC now seeks to stimulate better reporting by highlighting the signatories who clearly demonstrate their commitment to stewardship. Good reporting by signatories enables clients to assess managers and others based on their different approaches to stewardship.

The elements of this process are explained below.

Communicating privately our initial assessment

We have been assessing the more than 300 statements made by signatories to the Code, which has involved a detailed review by the Corporate Governance and Stewardship team, with internal moderation by other members of the FRC. The focus of our assessment has been to understand how each signatory approaches the recommendations set out in the Code.

We have assessed your organisation's public statement against the Code. Our initial assessment of your reporting indicates that you are likely to be considered a Tier 2 signatory to the Code in our final assessment.

Engaging with you to promote improvement

We are happy to discuss our initial assessment and proposed improvements to your reporting. Some elements of best practice reporting include that better statements give a complete description of how the signatory approaches their stewardship responsibilities. Where signatories do not comply with a principle of the Code, they give appropriate explanations as to why they do not and how their approach continues to meet the spirit of the Code. The overall disclosure is sufficient for the reader to understand how the signatory approaches the

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[1] Asset managers under the Conduct of Business Sourcebook must make a statement about the Code or if such a statement is not appropriate (given the business model) may consider disclose an alternative investment strategy.

recommendations set out in the guidance of the principles, and that the signatory takes stewardship seriously. The language is clear, open and transparent.

We expect that in some cases signatories may find explanation difficult and this may lead to the conclusion that their business model is not supported by the Code. Others may wish to redesign or amend their statements and we are happy to engage in that process. If you would like to meet FRC representatives, please contact the Corporate Governance and Stewardship team at stewardshipcode@frc.org.uk. Evidence which supports how you undertake your stewardship responsibilities can also be sent to this email address. It will be treated confidentially unless it is already public. The deadline for providing revised statements to the FRC is 26 August, but there is some flexibility.

We would be happy to meet you to discuss your signatory statement. We will also hold a seminar specifically for asset owners to explain the process and purpose of our tiering exercise and gather your thoughts on the evolution of the Code. If you wish to attend please email stewardshipcode@frc.org.uk. The seminar will take place in October.

Publicly tiering signatories

Over the summer the FRC will assess revised statements against the Code. We will focus on clear, meaningful, evidence-based statements about signatories' approach to the principles of the Code and the related guidance, including appropriate explanations where an organisation has chosen not to follow a principle or disclose information. We will make our assessment public.

There will be two assessment tiers:

- Tier 1 – those that meet our reporting expectations, including clear and meaningful explanations for non-compliance. Asset managers in Tier 1 will have provided further evidence of their approach to conflicts of interest, engagement and the resourcing and integration of stewardship; and

- Tier 2 – those that do not currently meet these expectations.

After publication, new or existing signatories will be able to achieve Tier 1 by providing us with the information we require.

Future review

I encourage you to take this opportunity to reaffirm your commitment to stewardship in order to raise standards and ensure the UK remains at the forefront of stewardship practice. We will review the impact of this exercise and will consider if any updates to the Code are needed.

Chris Bischoff

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Agenda No

Pension Fund Investment Board

18 February 2013

The Stewardship Code Statement

Recommendation
The board approve the proposal in 3.1

1 Introduction

1.1 Introduced in 2010, The UK Stewardship Code aims to enhance the quality of engagement between institutional investors and companies to help improve long-term returns to shareholders and the efficient exercise of governance responsibilities. The Code set out good practice on engagement with investee companies to which the Financial Reporting Council (FRC) believes institutional investors should aspire and operates on a 'comply or explain' basis. The Financial Services Authority (FSA) requires UK authorised asset managers to report on whether or not they apply the Code.

2 The Stewardship Code Principles

Principle 1 – Institutional investors should publicly disclose their policy on how they will discharge their stewardship responsibilities.

2.1 The fund has a long-standing commitment to responsible share ownership. Stewardship is an integral part of share ownership and therefore of the investment code, and requires the same commitment from fund managers. The practical application of the fund's policy is achieved through a combination of activities including, but not limited to: directly voting our shares, dialogue and liaison with fund managers on key issues and through our membership of the Local Authority Pension Fund Forum (LAPFF). In addition to this Stewardship Code Statement, the fund maintains a Statement of Investment Principles (SIP) which explains investment beliefs in more detail.

Principle 2 - Institutional investors should have a robust policy on managing conflicts of interest in relation to stewardship and this policy should be publicly disclosed.

2.2 The fund encourages fund managers to have effective policies addressing potential conflicts of interest. In respect of conflicts of interest within the fund, Investment Board members are required to make declarations of interest prior to each quarterly meeting.

Principle 3 - Institutional investors should monitor their investee companies.

2.3 Day-to-day responsibility for managing our equity holdings is delegated to our appointed fund managers. The fund expects them to monitor companies, intervene where necessary, and report back regularly on activity undertaken. In addition, the fund actively votes all its equity holdings directly and liaises with the fund managers as necessary.

Principle 4 - Institutional investors should establish clear guidelines on when and how they will escalate their stewardship activities.

2.4 Responsibility for day-to-day interaction with companies is delegated to the fund's fund managers, including the escalation of engagement when necessary. We expect fund managers to disclose their policies and procedures for escalation in their own Stewardship Code statements

Principle 5 - Institutional investors should be willing to act collectively with other investors where appropriate.

2.5 The fund seeks to work collaboratively with like-minded institutional shareholders in order to maximise the influence that it can have on individual companies. This is achieved in a variety of ways including through our membership of the LAPFF and ad-hoc initiatives proposed by our fund managers or other advisors.

Principle 6 - Institutional investors should have a clear policy on voting and disclosure of voting activity.

2.6 The fund directly exercises all votes attached to its global equity holdings. The voting policy is a custom policy based on global and local market best practice principles. All voting decisions are made by Fund officers using a variety of inputs including, but not limited to, specialist proxy research. The policy is reviewed at least annually in order to take account of regulatory developments.

Principle 7 - Institutional investors should report periodically on their stewardship and voting activities.

2.7 The fund reports annually on stewardship activity undertaken during the year in the report and accounts and a presentation is given to members who have the opportunity to ask questions about the fund's stewardship activities.

3 Proposals

3.1 The board approve the above principles and sign the Stewardship Code.

Report Author: Mathew Dawson, Acting Group Manager (Treasury and Pensions)

Head of Service: John Betts, Head of Finance

Strategic Director: David Carter, Strategic Director, Resources Group

Portfolio Holder(s): Chris Davis

Item 4

Pension Fund Investment Sub-Committee

12 December 2016

The 2016 Actuarial Valuation

Recommendations

That the Sub-Committee note the results in Appendix A and;

1.) Approve the initial Funding Strategy Statement in Appendix B and;

2.) Approve the proposal in 4.2 and Appendix C

1.0 Introduction

1.1 The Warwickshire County Council Pension Fund has a funding objective:

"To achieve and then maintain a funding target that requires assets equal to 100% of the present value of benefits based on completed service including provision for the effects of future salary growth and inflation up to retirement."

1.2 In order to achieve this objective, it is necessary to assess the fund's financial position on a periodic basis and implement future contribution rates with a view to achieving the desired status of 100% funding. LGPS pension funds are actuarially valued on a triennial basis and the fund's actuary, Hymans Robertson, has just completed the fund's valuation as at 31 March 2016.

1.3 This report sets out the initial summary outcome of the valuation.

1.4 The final signed actuary's report will be included in the March 2017 Sub Committee meeting.

2.0 Valuation Results

Deficit and Funding Level

2.1 At 31 March 2016, the Fund has a funding level of 82%, i.e., the Fund's assets are adequate to meet 82% of the future liabilities. This is an improvement of 5% on March 2013 due to investment returns greater than expected, advantageous membership experience, and changes to the way in which assumptions are derived, all of which have more than offset continuing falls in long term interest rates. The results can be found at **Appendix A**.

2.2 As part of the 2016 Actuarial Valuation process there was a requirement for the fund actuary to submit data to the Scheme Advisory Board to enable a full like-for-like comparison of LGPS scheme funding level using one set of assumptions. On this basis the fund had a funding level of 102% at March 2016.

Individual Employer Contribution Rates

2.3 While the fund is managed as a whole, it is effectively a number of sub-funds for each employer. This means that each employer contributes according to a contribution rate that specifically reflects the individual employer's membership profile.

2.4 Final employer contribution rates will be presented at the sub-committee meeting in March 2017 as part of the final signed report. The contribution rates in this report will be effective from April 2017 until March 2020.

2.5 Precepting employer contribution rates will be stabilised following the discussions at the June and September 2016 Sub-Committee meetings where Hymans Robertson were commissioned to undertake ComPASS modelling.

3.0 Future Funding Plan

3.1 The Pensions Fund's employer funding plans are set out in the Funding Strategy Statement (FSS). The FSS will be sent out to employers for consultation and presented at the March 2017 Sub-Committee meeting.

3.2 A draft FSS for discussion can be found at **Appendix B**.

4.0 Inflation Risk Premium

4.1 At the September Sub-Committee meeting a question was asked from the fund's independent advisor to the fund actuary why inflation risk premium was not used when setting assumptions.

4.2 Following the meeting discussions were held with the Chairman of the Sub-Committee and officers. It is proposed that we do not adopt inflation risk premium for this valuation based on the report at **Appendix C**.

	Name	**Contact Information**
Report Author	Mathew Dawson, Treasury and Pension Fund Manager	2227
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The report was circulated to the following members prior to publication:
Local Member(s):
Other members:

HYMANS ROBERTSON LLP

2016 Actuarial Valuation: Results and Contribution Strategy

Executive summary

Valuation Results

The tables below summarise the funding position as at 31 March 2013 and 31 March 2016.

Past Service Position	31 March 2013 (£m)	31 March 2016 (£m)
Past Service Liabilities	1,798	2,023
Market Value of Assets	1,379	1,665
Surplus / (Deficit)	(419)	(358)
Funding Level	**77%**	**82%**

These results are based on the assumptions detailed below for this valuation and are for the fund as a whole.

The underlying results for individual employers will differ from these results and will vary according to each employer's individual circumstances.

Contribution strategy

Contribution rates for employers have been set after considering the type of employer, whether it is open or closed to new entrants, its time horizon in the Fund and its financial strength. The contribution strategy for employers is detailed in the draft 2016 Funding Strategy Statement ("FSS") and our covering paper entitled 'Review of Funding Strategy Statement'.

As part of the 2016 valuation, the contribution stability mechanism that applies to long term secure employers (County Council, District & Borough Councils and Police Authority) has been reviewed to ensure it remains appropriate. This review was carried out using Asset Liability Modelling. The current stability mechanism limited annual contribution increases & decreases to 0.75% of pay for all long term, secure employers.

As a result of the review, the contribution stability mechanism needs revisiting for those employers with a mature, higher risk funding profile (Stratford District Council and Nuneaton & Bedworth Borough Council). We propose that the stability mechanism parameters for these employers is changed to annual increases of no more than 2.0% of pay and annual decreases of no greater than 1.0% of pay. For all other long term, secure employers, the review suggests that the current stability mechanism remains appropriate and no change is required.

Scope and Introduction

Scope

This document has been requested by and is addressed to Warwickshire County Council ("*WCC*") in its capacity as Administering Authority to the Warwickshire Pension Fund ("*the Fund*"). It has been prepared by Hymans Robertson to provide information on the results arising from the 2016 actuarial valuation and the outcome of the asset liability modelling exercise for discussion at the Investment Sub-Committee meeting on 12 December 2016. It has not been prepared for use for any other purpose and should not be so used.

No liability is accepted under any circumstances by Hymans Robertson LLP for any loss or damage occurring as a result of reliance on any statement, opinion or any error or omission contained herein where the report is used by or disclosed to a third party.

Introduction

We have carried out a valuation of the Fund as at 31 March 2016. The valuation of the Fund on a triennial basis is a regulatory requirement and is used to determine contribution rates payable by participating employers for the 3 year period commencing 1 April 2017.

The purpose of this document is not only to communicate the valuation results but, in addition, explain the approach adopted to setting contribution rates for the employers participating in the Fund.

The results shown are on the basis discussed with the officers of the Fund and agreed by the Committee over the last year. This basis has been used to set the funding strategy and contributions for the period 2017-20.

2016 – Assumptions

Broadly speaking, our assumptions fall into two categories – financial and demographic.

Demographic assumptions typically try to forecast **when** exactly benefits will come into payment and what form these will take. For example, when members will retire (e.g. at their normal retirement age or earlier), how long they will then survive and whether they will exchange some of their pension for tax-free cash.

Financial assumptions typically try to predict the **size** of these benefits. For example, how large members' final salaries will be at retirement and how their pensions will increase over time. In addition, the financial assumptions also help us to estimate how much all these benefits will cost the Fund in today's money (using the discount rate).

A summary of our assumptions for this valuation are set out below and full details can be found in Appendix B. These assumptions were discussed at the September Investment Sub-Committee meeting.

Financial assumptions

The table below summarises the financial assumptions that we believe are most appropriate for the valuation of members' benefits at this valuation. The corresponding assumptions from the 2013 valuation are shown for reference.

	31 March 2013		31 March 2016	
Financial assumptions	**Nominal**	**Real**	**Nominal**	**Real**
Discount Rate – pre retirement	4.6%	2.1%	3.8%	1.7%
Salary Increases*	4.3%	1.8%	2.8%	0.7%
Price Inflation / Pension Increases	2.5%	-	2.1%	-

** Excluding promotional increases*

We prepared an analysis paper on the Asset Outperformance Assumption (AOA) that is built into the discount rate, and this was discussed at the September meeting. The focus of the discussion was on whether to retain the 2013 assumption of 1.6% pa, or move to 1.8% pa. Following further discussion with officers, and advice from the Fund's Independent Advisor, it was agreed to keep the AOA at 1.6% p.a. Moving to an AOA of 1.8% pa has a relatively minor impact on contribution rates under the risk-based approach used at the 2016 valuation.

Longevity

Of all the demographic factors, longevity (or mortality) is the one that presents the greatest uncertainty. Many pension funds now regard longevity to be their second largest risk (after investment performance).

In setting the assumptions for longevity, there are two principal factors that we must consider:

- The life expectancy for members based on what we know today – known as "baseline longevity".
- How this life expectancy is forecast to improve in the future – known as the "longevity improvement".

At the 2013 valuation, we reflected the recent improvement in life expectancy in the assumptions. The emerging evidence is that these assumptions continue to remain broadly appropriate with only some minor revisions required. As a result, the longevity assumption has remained similar at this valuation to give the following sample average future life expectancies (in years) for members:

	31 March 2013	31 March 2016
Male		
Pensioners	22.4 years	22.5 years
Non-pensioners	24.3 years	24.3 years
Female		
Pensioners	24.4 years	24.7 years
Non-pensioners	26.6 years	26.7 years

Other demographic assumptions

We are in the unique position of having a very large local authority data set from which to derive our other demographic assumptions. This year, as in previous years, we have made full use of this to analyse the trends and patterns that are present in the membership of local authority funds and tailor our assumptions to reflect LGPS experience.

As with the financial and longevity assumptions, these demographic assumptions affect both the past service and future service valuation results. Further details on these assumptions are set out in Appendix A.

Further comments on the assumptions

Level of prudence

As required for Local Government Pension Scheme valuations, our proposed approach to this valuation must include a degree of prudence. This has been achieved by explicitly allowing for a margin of prudence in the Asset Outperformance Assumption that is built into the discount rate (see Appendix A).

For the avoidance of doubt, we believe that all other proposed assumptions represent the “best estimate” of future experience. This effectively means that there is a 50% chance that future experience will be better or worse than the chosen assumption.

Taken as a whole, we believe that our proposed assumptions are more prudent than the best estimate.

2016 – Whole fund results

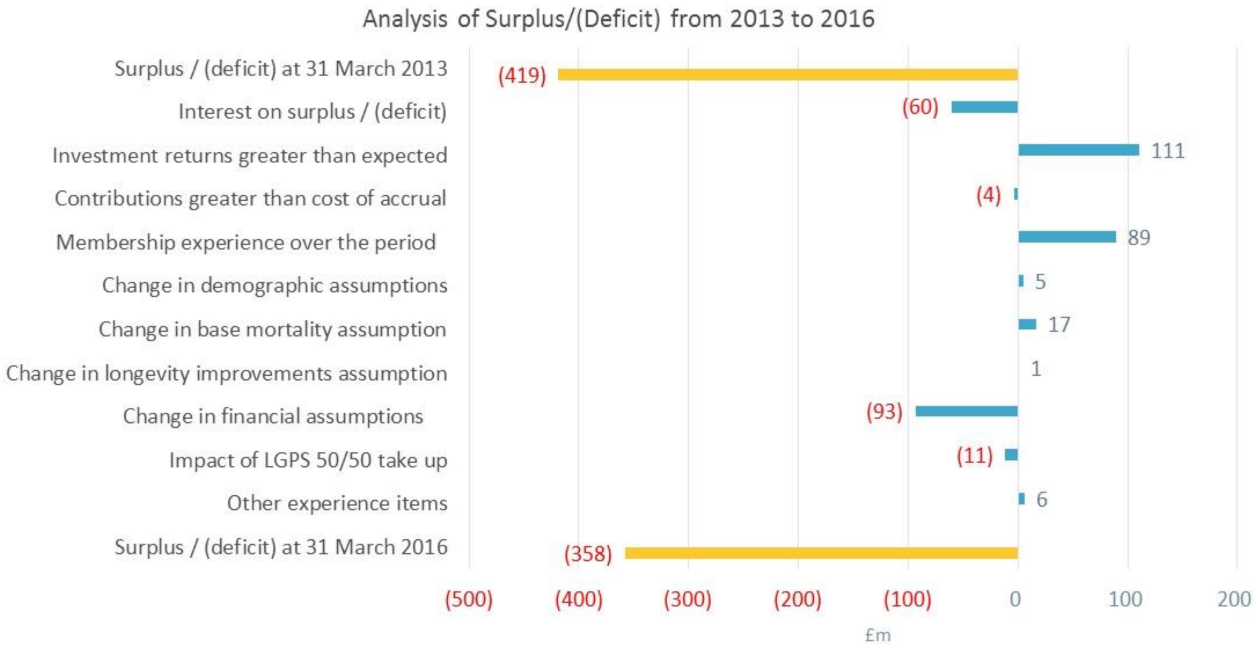
Past service – funding level and deficit

The table below shows the results for the past service position of the whole fund at 31 March 2016. These 2016 figures are based on the valuation assumptions, as set out in the previous section. The final results of the previous valuation at 31 March 2013 are also shown for reference.

Valuation Date	31 March 2013	31 March 2016
Past Service Position	***(£m)***	**(£m)**
Past Service Liabilities		
Employees	718	736
Deferred Pensioners	300	408
Pensioners	780	879
Total Liabilities	1,798	2,023
Market Value of Assets	1,379	1,665
Surplus / (Deficit)	**(419)**	**(358)**
Funding Level	**77%**	**82%**

Why the past service position has changed

The chart below illustrates the various factors that have led to the deficit rising between the previous valuation and this one.



Post-valuation events

These valuation results are effectively a snapshot of the Fund as at 31 March 2016. However, since that date various events have taken place which will have had an effect on the financial position of the Fund. Whilst we have not explicitly altered the valuation results to allow for these events a short discussion of these “post-valuation events” can still be beneficial in understanding the likelihood of meeting the various funding objectives.

2016 – Employer contribution rate strategies

A key challenge for the Administering Authority is to balance the need for stable, affordable employer contributions with the requirement to take a prudent, longer-term view of funding and ensure the solvency of the Fund. With this in mind, there are a number of methods which the Administering Authority may permit, in order to improve the stability of employer contributions. These include, where circumstances permit:-

- capping of employer contribution rate changes within a pre-determined range (“stabilisation”)
- the use of extended deficit recovery periods
- the phasing in of contribution rises or reductions
- the pooling of contributions amongst employers with similar characteristics
- the use of some form of security or guarantee to justify a lower contribution rate than would otherwise be the case.

Typically the contribution strategies for each employer depend on some key characteristics:

- Type of employer .e.g. Community Admission Body, Academy etc.;
- Approach to new entrants joining the Fund;
- Likely time horizon for future participation in the Fund; and
- Security of the employer and the risk they pose to the Fund (also known as the ‘employer covenant’).

Further details regarding the risk-based approach that has been used to set contribution rates at the 2016 valuation are discussed in our paper ‘Review of Funding Strategy Statement’. The table below summarises the parameters that feed into the risk-based approach for each category of employer.

Type of employer	Scheduled Bodies			Community Admission Bodies and Designating Employers		Transferee Admission Bodies
Sub-type	**Local Authorities and Police**	**Colleges and other FE establishments**	**Academies**	**Open to new entrants**	**Closed to new entrants**	**(all)**
Funding Target Basis used	Ongoing, assumes long-term Fund participation (see Appendix E)			Ongoing, but may move to "gilts basis" - see Note (a)		Ongoing, assumes fixed contract term in the Fund (see Appendix E)
Primary rate approach	(see Appendix D – D.2)					
Stabilised contribution rate?	Yes - see Note (b)	No	No	No	No	No
Maximum time horizon – Note (c)	19 years	19 years	19 years	19 years	Future Working Lifetime, subject to 19 years maximum	Outstanding contract term
Secondary rate – Note (d)	Monetary					
Treatment of surplus	Covered by stabilisation arrangement	Preferred approach: contributions kept at Primary rate. Reductions may be permitted by the Admin. Authority				Reduce contributions by spreading the surplus over the remaining contract term
Probability of achieving target – Note (e)	66%	70%	66%	75%	75%	66%
Phasing of contribution changes	Covered by stabilisation arrangement	3 years	3 years	3 years	None	None
Review of rates – Note (f)	Administering Authority reserves the right to review contribution rates and amounts, and the level of security provided, at regular intervals between valuations					Particularly reviewed in last 3 years of contract
New employer	n/a	n/a	Note (g)	Note (h)		Notes (h) & (i)
Cessation of participation: cessation debt payable	Cessation is assumed not to occur, as Scheduled Bodies are legally obliged to participate in the LGPS. In the rare event of cessation occurring (machinery of Government changes for example), the cessation debt principles applied would be as per Note (j).			Can be ceased subject to terms of admission agreement. Cessation debt will be calculated on a basis appropriate to the circumstances of cessation – see Note (j).		Participation is assumed to expire at the end of the contract. Cessation debt (if any) calculated on ongoing basis. Awarding Authority will be liable for future deficits and contributions arising.

Stabilisation

All Local Authorities and Police ("the precepting employers") are part of the stabilisation arrangement. Stabilisation is a mechanism where employer contribution rate variations from year to year are kept within a pre-determined range, thus allowing those employers' rates to be relatively stable.

In the interests of stability and affordability of employer contributions, the Administering Authority, on the advice of the Fund Actuary, believes that stabilising contributions can still be viewed as a prudent longer-term approach.

This stabilisation mechanism allows short term investment market volatility to be managed so as not to cause volatility in employer contribution rates, on the basis that a long term view can be taken on net cash inflow, investment returns and strength of employer covenant. The stabilisation mechanism in force between 1 April 2014 and 31 March 2017 limits increases and decreases to contribution rates for all precepting employers to 0.75% of pensionable payroll each year i.e. the maximum increase over 3 years is 2.25% of pay.

Following the 2013 valuation, the Fund undertook analysis of the funding profiles of the precepting employers. The analysis focussed on four key areas which help to inform an employer's funding profile:

- Maturity – active members vs. deferred & pensioner members
- Duration of liabilities – length of time over which benefits are payable
- Gearing – measure of an employer's payroll compared to its deficit
- Net cashflow (contributions vs. pensions paid)

The analysis identified that there are differences between employers within this group. We grouped employers who had similar funding profiles into three groups. Employers which are strongly cashflow negative, mature and highly geared in comparison to others were classed as 'higher risk', whilst those who are less mature, better funded and less geared were classed as 'lower risk'. There were also a group of 'medium risk' employers who fell between these two extremes. The following table details the results:

Higher risk employers	Medium risk employers	Lower risk employers
Stratford on Avon DC	Warwickshire County Council	Warwick DC
Nuneaton and Bedworth BC	Rugby BC	North Warwickshire BC
		Warwickshire Police

Different funding strategies may be required to deal with these differences between employers. In particular, different stabilisation arrangements (in the form of different annual increases/decreases to contribution rates) may be needed. For example, the higher risk employers may require higher annual contribution rate increases compared to the lower risk employers.

As part of the 2016 valuation, we carried out Asset Liability Modelling ("ALM") work for one employer in each of the above risk groups (to act as a proxy for all employers in the group) to investigate whether any changes were required to the existing contribution stability mechanism. The employers modelled were:

- Warwickshire Police ('lower risk')
- Warwickshire County Council ('medium risk')
- Stratford on Avon District Council ('higher risk')

We modelled four different stabilisation mechanisms for each employer. The scenarios are detailed below:

Stabilisation mechanism	Results label
Current stabilised contribution rate: annual increases/decreases limited to 0.75% of pay	+0.75/-0.75%
Alternative stabilised contribution rate: annual increases/decreases limited to 0.5% of pay	+0.5%/-0.5%
Alternative stabilised contribution rate: annual increases/decreases limited to 1.0% of pay	+1%/-1%
Alternative stabilised contribution rate: annual increases limited to 2.0% of pay & decreases limited to 1.0% of pay	+2.0%/-1.0%

Our ALM projects the assets, liabilities and contribution rate of each employer over a period of 21 years. The aim of our analysis was to examine the different stabilisation mechanisms against three key financial measures - **Prudence**, **Affordability** and **Stewardship** – to understand the most appropriate funding strategy.

Prudence

The Actuary needs to satisfy professional requirements that the funding plans in place are prudent and ensure there is a reasonable chance there will be enough money set aside for members' benefits. The analysis enables us to quantify the likelihood of being fully funded (or 'likelihood of success') in 21 years' time. In general, we want this likelihood to be above 66%, or 2 out of 3 outcomes.

The Actuary also needs to ensure that the funding plans are not too risky and limit the likelihood of poor funding outcomes. We do this by examining the average of the worst 5% of outcomes ('the downside risk').

Affordability

The cost of the pension benefits is a major expense for employers. The analysis shows the range of potential outcomes for the employer contribution rate in the longer term and allows us to assess the probability that the rate exceeds a particular threshold.

Stewardship

This measure allows us to examine the expected funding level and the range of potential outcomes for the funding level in the longer term. This provides a measure of the expected future financial health of the Fund and enables us to assess the probability that any given strategy is consistent with the safe stewardship of the Fund.

Results

The table below summarises the outcome of the ALM under each of the measures above for each stabilisation mechanism tested.

Warwickshire Police – Lower Risk

Stabilisation mechanism	Prudence – likelihood of success	Prudence – downside risk	Affordability	Stewardship
+0.75%/-0.75%	🟢	🟡	🟢	🟢
+0.5%/-0.5%	🟢	🟡	🟢	🟢
+1.0%/-1.0%	🟢	🟢	🟡	🟢
+2.0%/-1.0%	🟢	🟢	🟡	🟢

Warwickshire County Council – Medium Risk

Stabilisation mechanism	Prudence – likelihood of success	Prudence – downside risk	Affordability	Stewardship
+0.75%/-0.75%	🟢	🟡	🟡	🟢
+0.5%/-0.5%	🟢	🔴	🟢	🟢
+1.0%/-1.0%	🟢	🟡	🟡	🟢
+2.0%/-1.0%	🟢	🟡	🟡	🟢

Stratford District Council – Higher Risk

Stabilisation mechanism	Prudence – likelihood of success	Prudence – downside risk	Affordability	Stewardship
+0.75%/-0.75%	🟢	🔴	🟡	🟢
+0.5%/-0.5%	🔴	🔴	🟢	🟢
+1.0%/-1.0%	🟢	🔴	🟡	🟢
+2.0%/-1.0%	🟢	🔴	🟡	🟢

🔴 Clearly does not satisfy the measure

🟡 On the borderline of satisfying the measure

🟢 Satisfies the measure

The results of the ALM exercise show that the current stabilisation mechanism, limiting annual contribution rate increases/decreases to 0.75% of pay, is still an appropriate funding plan for the Lower Risk and Medium Risk employers. However, for the Higher Risk employers, the current stabilisation mechanism is not appropriate due to the level of downside risk. In fact, the level of downside risk in all scenarios is high. However, there is an improvement in the level of downside risk with higher annual contribution rate increases, therefore our advice is to revise the stability mechanism for Higher Risk employers to annual increases of no more than 2.0% of pay and annual decreases of no greater than 1.0% of pay.

Reliances and limitations

This document has been prepared for the purpose of informing the Committee of the 2016 formal valuation results and nothing contained within it affects any member's benefits. Furthermore, none of the figures should be used for accounting purposes (e.g. under FRS102 or IAS19) or setting employer contribution rates in isolation, or for any other purpose.

The results of the valuation are dependent on the quality of the data provided to us by the Administering Authority for the specific purpose of this valuation.

The figures in this report are based on our understanding of the benefit structure of the LGPS as at 31 March 2016.

The following Technical Actuarial Standards are applicable to this report and have been complied with where material:

- TAS R – Reporting;
- TAS D – Data;
- TAS M – Modelling; and
- Pensions TAS

Prepared by:-

Richard Warden FFA Robert Bilton FFA

For and on behalf of Hymans Robertson LLP

01 December 2016

Appendix A – Derivation of assumptions

The derivation of the assumptions is set out below.

Discount rate

In order to place a value on the Fund's liabilities, we first estimate all of the benefits that we expect to be paid from the Fund in the future. We then convert these to a value in today's money by working back (or "discounting") to the valuation date. This process requires the use of a discount rate. All other things being equal, a higher discount rate results in lower liabilities and vice versa. This is akin to the operation of a bank account – the higher the interest rate, the less we have to set aside now to reach our savings target in the future.

For the purposes of this valuation, the discount rate should reflect the returns that the Fund expects to earn on its investments over the long term. This is done by considering the expected return on the lowest risk investments held (government bonds) and applying a margin to allow for the greater returns that are expected to be generated by the equity-type investments held (equities, property etc). We refer to this additional margin as the Asset Outperformance Assumption (AOA).

For this valuation, we believe that an AOA of 1.6% pa is a prudent and appropriate assumption to adopt.

The table below details the composition of the discount rate at 31 March 2016:

	31 March 2016	
Discount rate	Nominal	Real
"Gilt-based" discount rate	2.2%	0.1%
Asset Outperformance Assumption	1.6%	-
Funding basis discount rate	3.8%	1.7%

Price inflation / pension increases

Due to emerging evidence of an increased gap between Retail Prices Inflation (RPI) and Consumer Prices Inflation (CPI), we expect the average long term difference between RPI and CPI to be 1.0% p.a. (compared to 0.8% p.a. at 2013).

The table below confirms our assumption for CPI/pension increases at this valuation:

Assumed pension increases	31 March 2016
Market-derived RPI	3.2%
RPI to CPI adjustment	1.0%
CPI / pension increases*	2.1%

* constructed via a geometric reduction

Salary increases

The Government announced during the 2015 Summer Budget that it would only fund pay increases in the public sector of 1% p.a. for 4 years from 2016-17 (which we take to mean until the 2019/20 financial year). Beyond then, there is a general belief that economic growth, and hence pay growth, is likely to be at a lower level than historically experienced. In addition, our analysis suggest that around half of the Fund's pre-2014 pay linked liabilities will have run-off by the time we reach 2020.

Our proposed salary increase assumption at 2016 is a "blended" rate that is based on 1% p.a. until 2020, followed by RPI + 0.5% pa thereafter. This compares to RPI + 1.0% pa at 2013.

The table below summarises our proposed salary increase assumption:

Assumed salary increases	31 March 2016
Market-derived RPI	3.2%
Salary increase in excess of inflation	(0.4%)
Total salary increase*	2.8%

* constructed via a geometric reduction

Note that this assumption is made in respect the general level of salary increases (e.g. as a result of inflation and other macroeconomic factors). We also make a separate allowance for expected pay rises granted in the future as a result of promotion. This assumption takes the form of a set of tables which model the expected promotional pay awards based on each member's age and class. Further details on this are available on request.

Mortality assumptions

Baseline longevity - VitaCurves

As a member of Club Vita, the longevity assumptions that have been adopted at this valuation are a bespoke set of VitaCurves that are specifically tailored to fit the membership profile of the Fund.

Further details regarding how these longevity assumptions are derived can be found in the report entitled "Tailoring Vita Curves to the Warwickshire Pension Fund", which was issued to the Administering Authority.

We have used a longevity improvement assumption based on the latest industry standard and combined information from our longevity experts in Club Vita. The start point for the improvements has been based on observed death rates in the Club Vita data bank.

In the short term we have assumed that the 'cohort effect' of strong improvements in life expectancy currently being observed amongst a generation born around the early and mid 1930s will start to tail off, resulting in life expectancy increasing less rapidly than has been seen over the last decade or two. This is known as 'peaked'.

In the long term (post age 70) we have assumed that increases in life expectancy will stabilise at a rate of increase of 1 year per decade for men and women. This is equivalent to assuming that longer term mortality rates will fall at a rate of 1.25% p.a. for men and women.

However, we have assumed that post age 90 improvements in mortality are hard to achieve, declining between ages 90 and 120 so that no improvements are seen at ages 120 and over. The initial rate of mortality is assumed to decline steadily above age 98.

Withdrawals (early leavers)

There were fewer withdrawals than expected between 2013 and 2016. We have adjusted the likelihood of withdrawals at each age so our assumption better reflects recent experience for 2016.

The rate of withdrawals will not have an impact of the future service rate calculated for your scheme, which will be calculated on the CARE benefit basis at the 2016 valuation.

Ill-health early retirements

The evidence from 2013 to 2016 shows that at a national level:

- There are fewer ill health retirements occurring than was assumed at the 2013 valuation; and
- The ages at which members take ill health early retirement are generally increasing.

We have used ill health early retirement assumptions at 2016 that reflect this experience.

Retirement age

We have adopted the retirement age pattern assumption as specified by the Scheme Advisory Board for preparing Key Performance Indicators.

50:50 option

From 1 April 2014, members have been able to elect to pay half the standard level of contributions for half the accrued benefit (i.e. an accrual rate of 1/98ths). This option affects future service only (past service is protected) and the employer's cost will fall as a result of members choosing this option.

As contribution rates are set once at each actuarial valuation, we need to make an assumption about the likely incidence of members taking the 50:50 option. At the 2013 valuation, accurately predicting take-up of the 50:50 option was challenging without any objective evidence. In evaluating the cost savings from pension reform, the Government Actuary's Department (GAD) assumed that 10% of scheme members would take up the 50:50 option. In the absence of any other information, we believed that this was a reasonable assumption to make at 2013.

However, the take up of the 50:50 option since 2014 has been much lower than expected with only around 0.2% of members participating in the 50:50 scheme. Therefore, we have reduced the assumption at the 2016 valuation to assume that 2% of members (uniformly distributed across the age, service and salary range) will choose the 50:50 option.

Other demographic assumptions

Our assumption for pay growth has been split into general inflationary pay increases and promotional pay growth. We carry out analysis on membership to set this level of assumed promotional pay growth at the 2016 valuation.

Our recommended commutation assumption for this valuation is 50% of HMRC limits for service to 1 April 2008 and 75% of HMRC limits for service from 1 April 2008.

Appendix B – Sensitivity of results

Illustrative results from alternative assumptions – past service position

The valuation results in the body of the paper are based on one set of assumptions, which we believe are most appropriate for the Fund given its circumstances. However, they are by no means the only set of assumptions that could be used.

The table below illustrates the funding level and deficit that would arise from using various combinations of the two most influential financial assumptions - namely investment return (discount rate) and inflation (benefit increases).

		Benefit Increases			
Discount Rates		1.9%	2.1%	2.3%	
	4.0%	(241) 87%	(299) 85%	(359) 82%	(Deficit) Funding Level
	3.8%	(298) 85%	(358) 82%	(420) 80%	(Deficit) Funding Level
	3.6%	(357) 82%	(419) 80%	(483) 78%	(Deficit) Funding Level

Review of Funding Strategy Statement

Purpose

This document has been requested by and is addressed to Warwickshire County Council (“the Council”) in its capacity as Administering Authority to the Warwickshire Pension Fund (“the Fund”).

This document and the draft Funding Strategy Statement (the “FSS”) are to be discussed at the Investment Sub-Committee Meeting on 12 December 2016. It has not been prepared for use for any other purpose and should not be so used.

Scope

The document provides background and overview of the key proposed changes to the Funding Strategy Statement and the subsequent employer outcomes which result from applying the changes.

Background

Under LGPS Regulations, all funds have a statutory obligation to produce a FSS.

The FSS has been prepared in collaboration with the Administering Authority and forms an integral part of the framework within which we carry out the triennial valuation to set employers’ contributions and to provide recommendations on funding decisions. The FSS also outlines how the funding strategy fits in with the investment strategy.

Once approved, a draft version of the FSS will be issued to all participating employers with any comments to be submitted within an agreed timeframe. Following the end of the consultation period, any comments received may lead to amendments to the document. The final version of the FSS should be approved by the Investment Sub-Committee and published during March 2017.

The current FSS was approved by the Investment Sub-Committee in 2014. Although essentially a refresh, each version is adapted to fit in with the changing environment and circumstance within which the Fund operates over time.

A key change to this version of the FSS is the application of a risk based framework for setting contributions. This has been applied across all employers. This change has been made to recognise the importance of taking employer risk profiles and covenant into account when setting employer contributions, ensuring a clear auditable process which is visible to scrutineers.

New guidance from the Chartered Institute of Public Finance and Accountancy (CIPFA)

New CIPFA guidance (“Preparing and maintaining a funding strategy statement in the Local Government Pension Scheme 2016”) moves the FSS into the modern pensions landscape and requires a number of changes to be incorporated.

This new guidance reflects the changed context in which the LGPS operates. The main changes relate to the following areas:

- Introduction of the Public Service Pensions Act 2013, under Section 13 of this Act the Government Actuary’s Department (GAD) must, following an actuarial valuation, report on whether the rate of employer contributions to the pension fund are set at an appropriate level to ensure the solvency of the pension fund and long term cost efficiency of the LGPS so far as relating to the pension fund. The new guidance seeks to define these terms.
- The new 2014 scheme and associated regulations;

- Changes to the LGPS investment regulations.
- How the fund handles the growth in the number of its employers and the evolving nature of the provision of public services.

Change in approach for setting employer contributions

A key change to the funding strategy is the use of a risk based framework for setting all employer contributions.

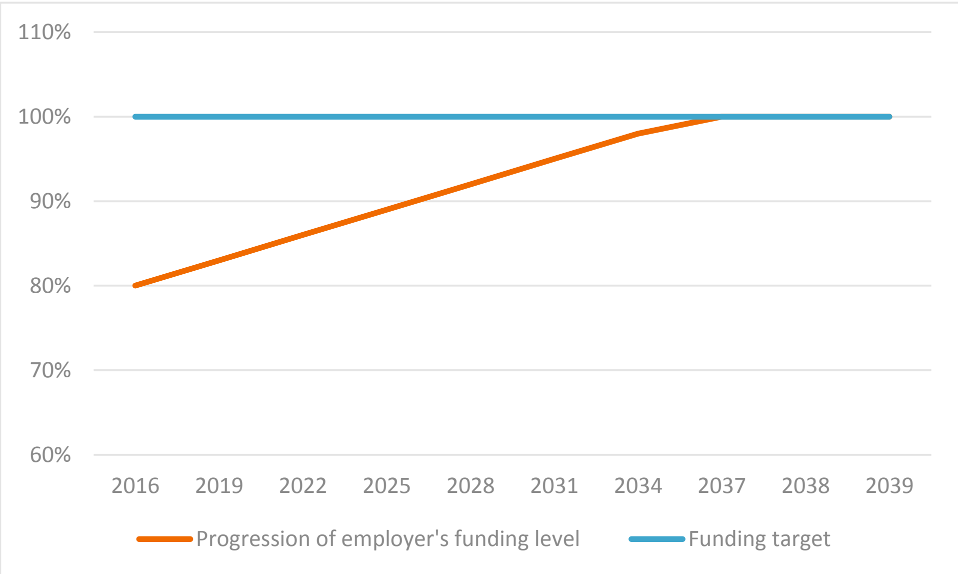
At the 2013 valuation we introduced a risk based approach to setting contribution rates for the precepting bodies, (e.g. Warwickshire County Council), academies, colleges and some admitted bodies - this approach leads to a stable contribution rate which achieves the employer's funding target over the longer term with a prudent likelihood of success (or "level of risk").

For the remaining employers in the Fund, the traditional method continued to be used. However, for the 2016 valuation, contribution rates for every employer have been set using a risk based approach.

We compare the traditional vs risk based approaches below.

Traditional approach to setting employer contributions

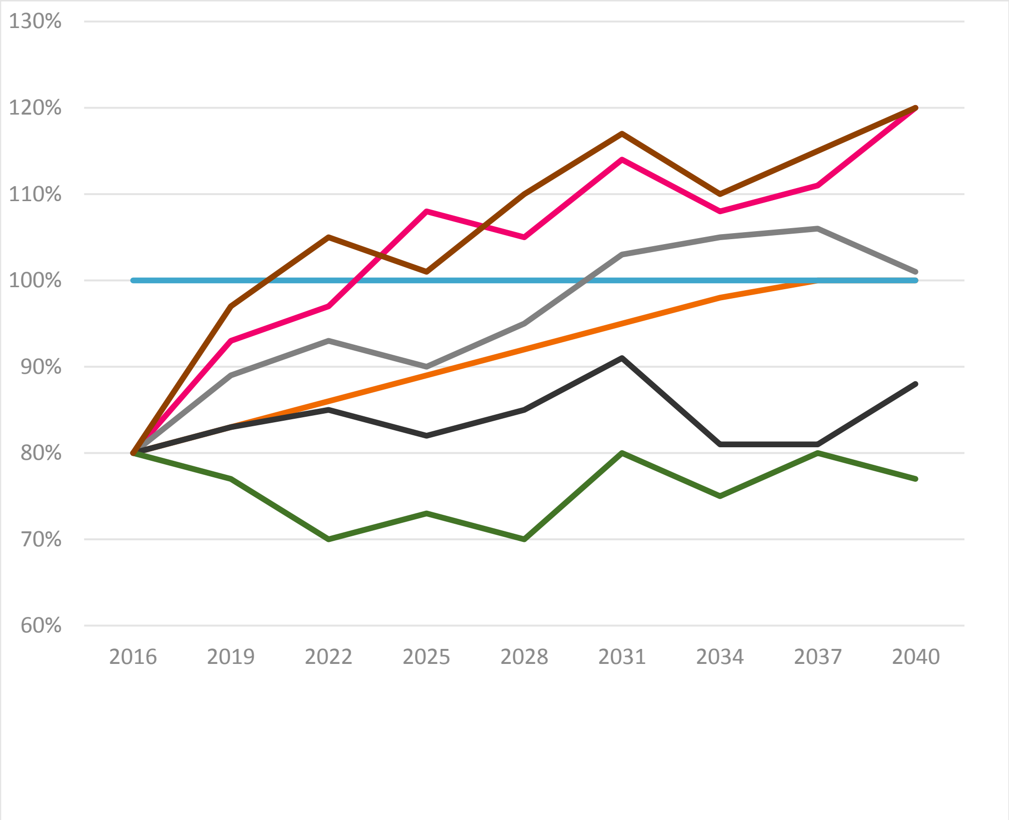
Historically, actuaries have set employer contribution rates by using a **single set** of funding assumptions. The single set of assumptions reflects market conditions at the valuation date only. By using this method, there is an implicit assumption that the future will exactly follow expectations (i.e. the assumptions used in the calculation). This approach is summarised in the chart below. In this case, the funding level for an employer that is 80% funded at 2016 is assumed to improve on a 'straight line' basis until it is 100% funded at the end of its deficit recovery period in 2037.



However, we know that in reality pension funding is uncertain. Changes in investment markets cannot be predicted, and do not follow a "straight line". For example, this uncertainty could take the form of higher than expected investment returns (increasing the value of the assets by more than assumed) or higher than expected inflation (increasing the value of the liabilities by more than assumed). The future progression of the funding level could look significantly different than the chart above.

Risk based approach to setting employer contribution rates

The actual progression of the funding level could take one of many different paths. The following chart shows some possible paths – under favourable investment conditions, the employer may be in surplus over the longer term. Alternatively, it could still be in deficit and have a funding level of less than 100%.

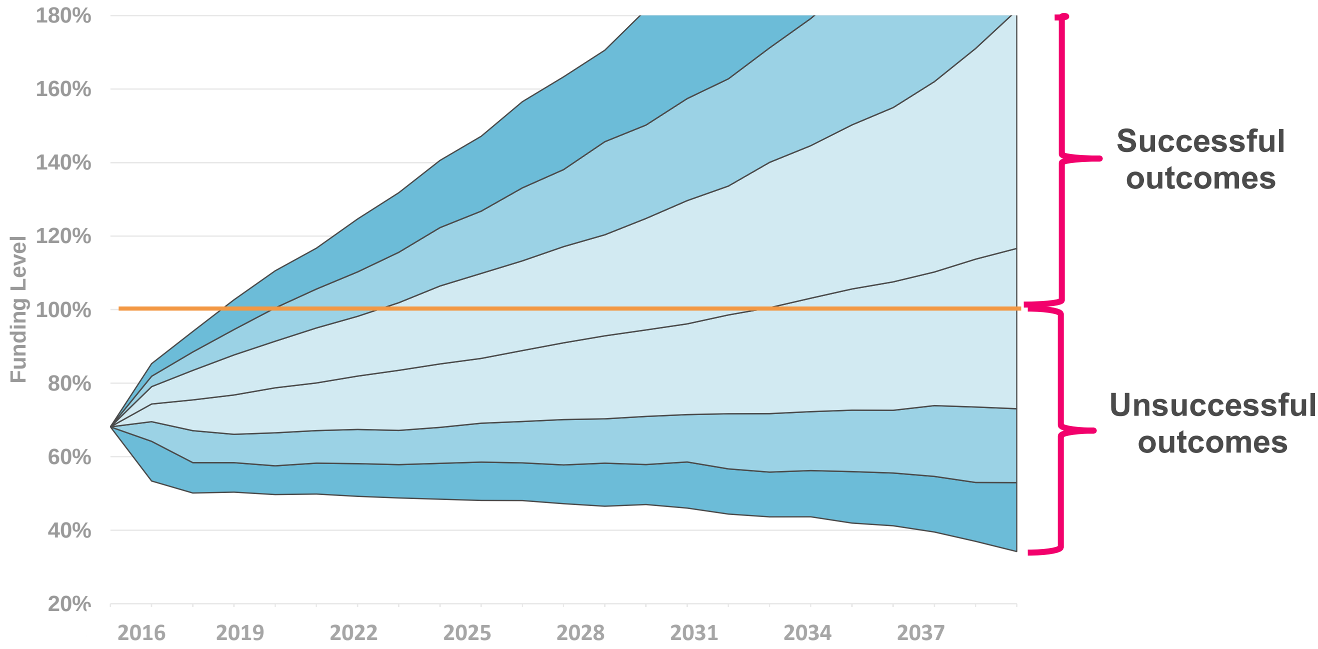


Whilst we do not know which path will ultimately happen in practice, we do know that market uncertainty means that there is a risk that the employer may not reach its long term funding target.

This risk can never be fully mitigated. However the main disadvantage of the traditional approach is that it does not allow the Fund, employer or actuary to assess and understand the risk associated with a proposed contribution strategy and the likelihood of its success, or otherwise.

The Fund's new risk based approach requires thousands of simulations to be projected of how an employer's assets and liabilities may evolve over the future to form a distribution of future funding levels . Each simulation represents a different possible economic scenario and varies due to different future investment returns, inflation and other financial factors.

Once we have a sufficient number of outcomes to form a statistically credible distribution (we usually use 5,000 outcomes), we can examine what level of contribution rate gives an appropriate likelihood of meeting the employer's funding target within the agreed timeframe (i.e. a sufficient number of successful outcomes). The picture on the next page shows a sample distribution of outcomes for an employer.



Having this 'funnel' of outcomes allows us to understand the likelihood of the actual outcome being higher or lower than a certain level. For example, there is a 2/3rds chance that the funding level will be somewhere within the lightest blue shaded area, and there is a 1 in 100 chance that the funding level will be outside the funnel altogether. Using these results, we can then set a contribution rate that leads to an agreed number of funding outcomes being successful (e.g. with a likelihood of say 75%).

Considerations when setting risk based contribution rates

Setting contribution rates using a risk based approach requires the Fund to consider 3 steps for each employer:

1 The employer's funding target

2 How long the employer has to reach the funding target (the time horizon previously known as the deficit recovery period)

3 A prudent likelihood of meeting the funding target at the end of the time horizon (e.g. 2/3rds, 75%)

The way that the Fund is tackling the first two steps for each employer group is outlined in **Appendix A** (in the "Funding Target Basis used" and 'Maximum time horizon' rows; this table appears in section 3.3, page 10 of the draft FSS), and depends on:

- Employer type, and
- Approach to new entrants i.e. open or closed.

Setting an appropriate likelihood under step 3 for each employer requires further analysis by the Administering Authority. For example, the Fund may be willing to accept a lower likelihood of success for an employer which has a strong funding position and is financially secure, compared to an employer with a weak funding position and poor business outlook.

To understand the funding profile of employers, certain metrics (e.g. funding level, net cash flow position) can be analysed. Alongside this the Fund has detailed background knowledge of the participating employers which allows it to understand the financial strength of each employer.

Combining these sources of information allows the Fund to understand the risk profile of each employer. Risk in this context means the likelihood that the employer is unable to meet its future obligations to the Fund and is then in turn unable to meet its funding target. Any such failure has an impact on other employers in the Fund (who will need to make good any funding deficit that cannot be met by the employer).

Other important changes made to the funding strategy at 2016

In addition to moving to a risk based approach for all employers, two other important changes have been made to the draft funding strategy at this valuation.

- The contribution stability mechanism that applies for all large precepting employers has been reviewed as part of the 2016 valuation. During this review, it became apparent that the current mechanism of limiting annual changes in contribution rates to 0.75% of payroll is no longer appropriate for all precepting employers. For two employers, their funding profile is significantly more mature, and therefore the annual contribution rate changes need to be widened to annual increases of no more than 2.0% of payroll, or annual reductions of no greater than 1% of payroll, to maintain a robust funding plan.
- The 'prudent likelihood of achieving target' (Step 3 in the 3 step process above) was set at 70% for academy schools at the 2013 valuation (compared to 66% for the precepting bodies). This approach was taken as there were significant uncertainties around the validity of the guarantee offered by the Department for Education ("DfE") which promises to make good any funding deficit in light of an academy ceasing participation in the Fund. Since then, information has been made available via a Freedom of Information request that gives the Fund more comfort about the strength of the guarantee. Therefore, the 'prudent likelihood of achieving target' has been reduced to 66% for academy schools at the 2016 valuation.

Reliances and limitations

This information is addressed to Warwickshire County Council as Administering Authority to the Warwickshire Pension Fund. It has been prepared in our capacity as actuaries to the Fund and is solely for the purpose of outlining the background and changes to the FSS for the 2016 valuation. It has not been prepared for any other purpose and should not be used for any other purpose.

The Administering Authority is the only user of this advice. Neither we nor Hymans Robertson LLP accept any liability to any party other than the Administering Authority unless we have expressly accepted such liability in writing. The advice or any part of it must not be disclosed or released in any medium to any other third party without our prior written consent. In circumstances where disclosure is permitted, the advice may only be released or otherwise disclosed in its entirety fully disclosing the basis upon which it has been produced (including any and all limitations, caveats or qualifications).

The following Technical Actuarial Standards are applicable in relation to this advice, and have been complied with where material and to a proportionate degree:

- TAS R – Reporting; and
- Pensions TAS.

Prepared by:-

Richard Warden FFA   Robert Bilton FFA

01 December 2016

For and on behalf of Hymans Robertson LLP

Appendix A – Funding strategy approach

Type of employer	Scheduled Bodies			Community Admission Bodies and Designating Employers		Transferee Admission Bodies
Sub-type	**Local Authorities and Police**	**Colleges and other FE establishments**	**Academies**	**Open to new entrants**	**Closed to new entrants**	**(all)**
Funding Target Basis used	Ongoing, assumes long-term Fund participation (see Appendix E)			Ongoing, but may move to "gilts basis" - see Note (a)		Ongoing, assumes fixed contract term in the Fund (see Appendix E)
Primary rate approach	(see Appendix D – D.2)					
Stabilised contribution rate?	Yes - see Note (b)	No	No	No	No	No
Maximum time horizon – Note (c)	19 years	19 years	19 years	19 years	Future Working Lifetime, subject to 19 years maximum	Outstanding contract term
Secondary rate – Note (d)	Monetary					
Treatment of surplus	Covered by stabilisation arrangement	Preferred approach: contributions kept at Primary rate. Reductions may be permitted by the Admin. Authority				Reduce contributions by spreading the surplus over the remaining contract term
Probability of achieving target – Note (e)	66%	70%	66%	75%	75%	66%
Phasing of contribution changes	Covered by stabilisation arrangement	3 years	3 years	3 years	None	None
Review of rates – Note (f)	Administering Authority reserves the right to review contribution rates and amounts, and the level of security provided, at regular intervals between valuations					Particularly reviewed in last 3 years of contract
New employer	n/a	n/a	Note (g)	Note (h)		Notes (h) & (i)
Cessation of participation: cessation debt payable	Cessation is assumed not to occur, as Scheduled Bodies are legally obliged to participate in the LGPS. In the rare event of cessation occurring (machinery of Government changes for example), the cessation debt principles applied would be as per Note (j).			Can be ceased subject to terms of admission agreement. Cessation debt will be calculated on a basis appropriate to the circumstances of cessation – see Note (j).		Participation is assumed to expire at the end of the contract. Cessation debt (if any) calculated on ongoing basis. Awarding Authority will be liable for future deficits and contributions arising.

Warwickshire Pension Fund

DRAFT Funding Strategy Statement

November 2016

Contents

DRAFT Funding Strategy Statement PAGE

1 Introduction

1.1 What is this document?

This is the Funding Strategy Statement (FSS) of the Warwickshire Pension Fund ("the Fund"), which is administered by Warwickshire County Council, ("the Administering Authority").

It has been prepared by the Administering Authority in collaboration with the Fund's actuary, Hymans Robertson LLP, and after consultation with the Fund's employers and investment adviser. It is effective from [DATE POST CONSULTATION].

The FSS is reviewed in detail at least every three years as part of the triennial valuation process. The next full review is due to be completed as part of the valuation process at 31 March 2019. A revised statement will also be issued in the event of significant or material change arising.

If you have any queries please contact Neil Buxton in the first instance at neilbuxton@warwickshire.gov.uk.

1.2 What is the Warwickshire Pension Fund?

The Fund is part of the national Local Government Pension Scheme (LGPS). The LGPS was set up by the UK Government to provide retirement and death benefits for local government employees, and those employed in similar or related bodies, across the whole of the UK. The Administering Authority runs the Fund, in effect the LGPS for the Warwickshire area, to make sure it:

- receives the proper amount of contributions from employees and employers, and any transfer payments;
- invests the contributions appropriately, with the aim that the Fund's assets grow over time with investment income and capital growth; and
- uses the assets to pay Fund benefits to the members (as and when they retire, for the rest of their lives), and to their dependants (as and when members die), as defined in the LGPS Regulations. Assets are also used to pay transfer values and administration costs.

The roles and responsibilities of the key parties involved in the management of the Fund are summarised in Appendix B.

1.3 Why does the Fund need a Funding Strategy Statement?

Employees' benefits are guaranteed by the LGPS Regulations, and do not change with market values or employer contributions. Investment returns will help pay for some of the benefits, but probably not all, and certainly with no guarantee. Employees' contributions are fixed in those Regulations also, at a level which covers only part of the cost of the benefits.

Therefore, employers need to pay the balance of the cost of delivering the benefits to members and their dependants.

The FSS focuses on how employer liabilities are measured, the pace at which these liabilities are funded, and how employers or pools of employers pay for their own liabilities. This statement sets out how the Administering Authority has balanced the conflicting aims of:

- affordability of employer contributions,
- transparency of processes,
- stability of employers' contributions, and
- prudence in the funding basis.

There are also regulatory requirements for an FSS, as given in Appendix A.

The FSS is a summary of the Fund's approach to funding its liabilities, and this includes reference to the Fund's other policies; it is not an exhaustive statement of policy on all issues. The FSS forms part of a framework which includes:

- the LGPS Regulations;
- the Rates and Adjustments Certificate (confirming employer contribution rates for the next three years) which can be found in an appendix to the formal valuation report;
- the Fund's policies on admissions, cessations and bulk transfers;
- actuarial factors for valuing individual transfers, early retirement costs and the costs of buying added service; and
- the Fund's Statement of Investment Principles / Investment Strategy Statement (see Section 4)

1.4 How does the Fund and this FSS affect me?

This depends on who you are:

- a member of the Fund, i.e. a current or former employee, or a dependant: the Fund needs to be sure it is collecting and holding enough money so that your benefits are always paid in full;
- an employer in the Fund (or which is considering joining the Fund): you will want to know how your contributions are calculated from time to time, that these are fair by comparison to other employers in the Fund, and in what circumstances you might need to pay more. Note that the FSS applies to all employers participating in the Fund;
- an Elected Member whose council participates in the Fund: you will want to be sure that the council balances the need to hold prudent reserves for members' retirement and death benefits, with the other competing demands for council money;
- a Council Tax payer: your council seeks to strike the balance above, and also to minimise cross-subsidies between different generations of taxpayers.

1.5 What does the FSS aim to do?

The FSS sets out the objectives of the Fund's funding strategy, such as:

- to ensure the long-term solvency of the Fund, using a prudent long term view. This will ensure that sufficient funds are available to meet all members'/dependants' benefits as they fall due for payment;
- to ensure that employer contribution rates are reasonably stable where appropriate;
- to minimise the long-term cash contributions which employers need to pay to the Fund, by recognising the link between assets and liabilities and adopting an investment strategy which balances risk and return (**NB** this will also minimise the costs to be borne by Council Tax payers);
- to reflect the different characteristics of different employers in determining contribution rates. This involves the Fund having a clear and transparent funding strategy to demonstrate how each employer can best meet its own liabilities over future years; and
- to use reasonable measures to reduce the risk to other employers and ultimately to the Council Tax payer from an employer defaulting on its pension obligations.

1.6 How do I find my way around this document?

In Section 2 there is a brief introduction to some of the main principles behind funding, i.e. deciding how much an employer should contribute to the Fund from time to time.

In Section 3 we outline how the Fund calculates the contributions payable by different employers in different situations.

In Section 4 we show how the funding strategy is linked with the Fund's investment strategy.

In the Appendices we cover various issues in more detail if you are interested:

A. the regulatory background, including how and when the FSS is reviewed,

B. who is responsible for what,

C. what issues the Fund needs to monitor, and how it manages its risks,

D. some more details about the actuarial calculations required,

E. the assumptions which the Fund actuary currently makes about the future,

F. a glossary explaining the technical terms occasionally used here.

2 Basic Funding issues

(More detailed and extensive descriptions are given in Appendix D).

2.1 How does the actuary measure the required contribution rate?

In essence this is a three-step process:

1. Calculate the ultimate funding target for that employer, i.e. the ideal amount of assets it should hold in order to be able to pay all its members' benefits. See Appendix E for more details of what assumptions we make to determine that funding target;

2. Determine the time horizon over which the employer should aim to achieve that funding target. See the table in 3.3 and Note (c) for more details;

3. Calculate the employer contribution rate such that it has at least a given probability of achieving that funding target over that time horizon, allowing for different likelihoods of various possible economic outcomes over that time horizon. See 2.3 below, and the table in 3.3 Note (e) for more details.

2.2 What is each employer's contribution rate?

This is described in more detail in Appendix D. Employer contributions are normally made up of two elements:

a) the estimated cost of benefits being built up each year, after deducting the members' own contributions and including administration expenses. This is referred to as the "*Primary rate*", and is expressed as a percentage of members' pensionable pay; plus

b) an adjustment for the difference between the Primary rate above, and the actual contribution the employer needs to pay, referred to as the "*Secondary rate*". In broad terms, payment of the Secondary rate will aim to return the employer to full funding over an appropriate period (the "time horizon"). The Secondary rate may be expressed as a percentage of pay and/or a monetary amount in each year.

The rates for all employers are shown in the Fund's Rates and Adjustments Certificate, which forms part of the formal Actuarial Valuation Report. Employers' contributions are expressed as minima, with employers able to pay contributions at a higher rate. Account of any higher rate will be taken by the Fund actuary at subsequent valuations, i.e. will be reflected as a credit when next calculating the employer's contributions.

2.3 What different types of employer participate in the Fund?

Historically the LGPS was intended for local authority employees only. However over the years, with the diversification and changes to delivery of local services, many more types and numbers of employers now participate. There are currently more employers in the Fund than ever before, a significant part of this being due to new academies.

In essence, participation in the LGPS is open to public sector employers providing some form of service to the local community. Whilst the majority of members will be local authority employees (and ex-employees), the majority of participating employers are those providing services in place of (or alongside) local authority services: academy schools, contractors, housing associations, charities, etc.

The LGPS Regulations define various types of employer as follows:

Scheduled bodies - councils, and other specified employers such as academies and further education establishments. These must provide access to the LGPS in respect of their employees who are not eligible to join another public sector scheme (such as the Teachers Scheme). These employers are so-called because they are specified in a schedule to the LGPS Regulations.

It is now possible for Local Education Authority schools to convert to academy status, and for other forms of school (such as Free Schools) to be established under the academies legislation. All such **academies (or Multi Academy Trusts)**, as employers of non-teaching staff, become separate new employers in the Fund. As academies are defined in the LGPS Regulations as "Scheduled Bodies", the Administering Authority has no discretion over whether to admit them to the Fund, and the academy has no discretion whether to continue to allow its non-teaching staff to join the Fund. There has also been guidance issued by the DCLG regarding the terms of academies' membership in LGPS Funds.

Designating employers - employers such as town and parish councils are able to participate in the LGPS via resolution (and the Fund cannot refuse them entry where the resolution is passed). These employers can designate which of their employees are eligible to join the scheme.

Other employers are able to participate in the Fund via an admission agreement, and are referred to as 'admission bodies'. These employers are generally those with a "community of interest" with another scheme employer – **community admission bodies** ("CAB") or those providing a service on behalf of a scheme employer – **transferee admission bodies** ("TAB"). CABs will include housing associations and charities, TABs will generally be contractors. The Fund is able to set its criteria for participation by these employers and can refuse entry if the requirements as set out in the Fund's admissions policy are not met. (NB The terminology CAB and TAB has been dropped from recent LGPS Regulations, which instead combine both under the single term 'admission bodies'; however, we have retained the old terminology here as we consider it to be helpful in setting funding strategies for these different employers).

2.4 How does the measured contribution rate vary for different employers?

All three steps above are considered when setting contributions (more details are given in Section 3 and Appendix D).

1. The **funding target** is based on a set of assumptions about the future, (e.g. investment returns, inflation, pensioners' life expectancies). However, if an employer is approaching the end of its participation in the Fund then its funding target may be set on a more prudent basis, so that its liabilities are less likely to be spread among other employers after its cessation;

2. The **time horizon** required is, in broad terms, the period over which any deficit is to be recovered. A shorter period will lead to higher contributions, and vice versa (all other things being equal). Employers may be given a lower time horizon if they have a less permanent anticipated membership, or do not have tax-raising powers to increase contributions if investment returns under-perform; and

3. The **probability of achieving** the funding target over that time horizon will be dependent on the Fund's view of the strength of employer covenant and its funding profile. Where an employer is considered to be weaker, or potentially ceasing from the Fund, then the required probability will be set higher, which in turn will increase the required contributions (and vice versa).

For some employers it may be agreed to pool contributions, see 3.4.

Any costs of non ill-health early retirements must be paid by the employer, see 3.6.

Costs of ill-health early retirements are covered in 3.7 and 3.8.

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2.5 How is a deficit (or surplus) calculated?

An employer's "funding level" is defined as the ratio of:

- the market value of the employer's share of assets (see Appendix D, section D5, for further details of how this is calculated), to
- the value placed by the actuary on the benefits built up to date for the employer's employees and ex-employees (the "liabilities"). The Fund actuary agrees with the Administering Authority the assumptions to be used in calculating this value.

If this is less than 100% then it means the employer has a shortfall, which is the employer's deficit; if it is more than 100% then the employer is said to be in surplus. The amount of deficit or shortfall is the difference between the asset value and the liabilities value.

It is important to note that the deficit/surplus and funding level are only measurements at a particular point in time, on a particular set of assumptions about the future. Whilst we recognise that various parties will take an interest in these measures, for most employers the key issue is how likely it is that their contributions will be sufficient to pay for their members' benefits (when added to their existing asset share and anticipated investment returns).

In short, deficits and funding levels are short term measures, whereas contribution-setting is a longer term issue.

2.6 How does the Fund recognise that contribution levels can affect council and employer service provision, and council tax?

The Administering Authority and the Fund actuary are acutely aware that, all other things being equal, a higher contribution required to be paid to the Fund will mean less cash available for the employer to spend on the provision of services. For instance:

- Higher Pension Fund contributions may result in reduced council spending, which in turn could affect the resources available for council services, and/or greater pressure on council tax levels;
- Contributions which Academies pay to the Fund will therefore not be available to pay for providing education; and
- Other employers will provide various services to the local community, perhaps through housing associations, charitable work, or contracting council services. If they are required to pay more in pension contributions to the LGPS then this may affect their ability to provide the local services at a reasonable cost.

Whilst all this is true, it should also be borne in mind that:

- The Fund provides invaluable financial security to local families, whether to those who formerly worked in the service of the local community who have now retired, or to their families after their death;
- The Fund must have the assets available to meet these retirement and death benefits, which in turn means that the various employers must each pay their own way. Lower contributions today will mean higher contributions tomorrow: deferring payments does not alter the employer's ultimate obligation to the Fund in respect of its current and former employees;
- Each employer will generally only pay for its own employees and ex-employees (and their dependants), not for those of other employers in the Fund;

- The Fund strives to maintain reasonably stable employer contribution rates where appropriate and possible. However, a recent shift in regulatory focus means that solvency within each generation is considered by the Government to be a higher priority than stability of contribution rates;
- The Fund wishes to avoid the situation where an employer falls so far behind in managing its funding shortfall that its deficit becomes unmanageable in practice: such a situation may lead to employer insolvency and the resulting deficit falling on the other Fund employers. In that situation, those employers' services would in turn suffer as a result;
- Council contributions to the Fund should be at a suitable level, to protect the interests of different generations of council tax payers. For instance, underpayment of contributions for some years will need to be balanced by overpayment in other years; the council will wish to minimise the extent to which council tax payers in one period are in effect benefitting at the expense of those paying in a different period.

Overall, therefore, there is clearly a balance to be struck between the Fund's need for maintaining prudent funding levels, and the employers' need to allocate their resources appropriately. The Fund achieves this through various techniques which affect contribution increases to various degrees (see 3.1). In deciding which of these techniques to apply to any given employer, the Fund will make a risk based judgement of the employer. This judgement will have regard to the type of employer, its membership profile and funding position, any guarantors or other security provision, material changes anticipated, etc. This helps the Fund to establish a picture of the financial standing of the employer, i.e. its ability to meet its long term Fund commitments.

For instance, where the Administering Authority has reasonable confidence that an employer will be able to meet its funding commitments, then the Fund will permit options such as stabilisation (see 3.3 Note (b)), a longer time horizon relative to other employers, and/or a lower probability of achieving their funding target. Such options will temporarily produce lower contribution levels than would otherwise have applied. This is permitted in the expectation that the employer will still be able to meet its obligations for many years to come.

On the other hand, where there is doubt that an employer will be able to meet its funding commitments or withstand a significant change in its commitments, then a higher funding target, and/or a shorter deficit recovery period relative to other employers, and/or a higher probability of achieving the target may be required.

The Fund actively seeks employer input, including to its funding arrangements, through various means: see Appendix A.

3 Calculating contributions for individual Employers

3.1 General comments

A key challenge for the Administering Authority is to balance the need for stable, affordable employer contributions with the requirement to take a prudent, longer-term view of funding and ensure the solvency of the Fund. With this in mind, the Fund's three-step process identifies the key issues:

1. What is a suitably (but not overly) prudent funding target?

2. How long should the employer be permitted to reach that target? This should be realistic but not so long that the funding target is in danger of never actually being achieved.

3. What probability is required to reach that funding target? This will always be less than 100% as we cannot be certain of future market movements. Higher probability "bars" can be used for employers where the Fund wishes to reduce the risk that the employer ceases leaving a deficit to be picked up by other employers.

These and associated issues are covered in this Section.

The Administering Authority recognises that there may occasionally be particular circumstances affecting individual employers that are not easily managed within the rules and policies set out in the Funding Strategy Statement. Therefore the Administering Authority may, at its sole discretion, direct the actuary to adopt alternative funding approaches on a case by case basis for specific employers.

3.2 The effect of paying lower contributions

In limited circumstances the Administering Authority may permit employers to pay contributions at a lower level than is assessed for the employer using the three step process above. At their absolute discretion the Administering Authority may:

- extend the time horizon for targeting full funding;
- adjust the required probability of meeting the funding target;
- permit an employer to participate in the Fund's stabilisation mechanisms;
- permit extended phasing in of contribution rises or reductions;
- pool contributions amongst employers with similar characteristics; and/or
- accept some form of security or guarantee in lieu of a higher contribution rate than would otherwise be the case.

Employers which are permitted to use one or more of the above methods will often be paying, for a time, contributions less than required to meet their funding target, over the appropriate time horizon with the required likelihood of success. Such employers should appreciate that:

- their true long term liability (i.e. the actual eventual cost of benefits payable to their employees and ex-employees) is not affected by the pace of paying contributions;
- lower contributions in the short term will be assumed to incur a greater loss of investment returns on the deficit. Thus, deferring a certain amount of contribution may lead to higher contributions in the long-term; and
- it may take longer to reach their funding target, all other things being equal.

Overleaf (3.3) is a summary of how the main funding policies differ for different types of employer, followed by more detailed notes where necessary.

Section 3.4 onwards deals with various other funding issues which apply to all employers.

3.3 The different approaches used for different employers

Type of employer	Scheduled Bodies			Community Admission Bodies and Designating Employers		Transferee Admission Bodies
Sub-type	**Local Authorities and Police**	**Colleges and other FE establishments**	**Academies**	**Open to new entrants**	**Closed to new entrants**	**(all)**
Funding Target Basis used	Ongoing, assumes long-term Fund participation (see Appendix E)			Ongoing, but may move to "gilts basis" - see Note (a)		Ongoing, assumes fixed contract term in the Fund (see Appendix E)
Primary rate approach	(see Appendix D – D.2)					
Stabilised contribution rate?	Yes - see Note (b)	No	No	No	No	No
Maximum time horizon – Note (c)	19 years	19 years	19 years	19 years	Future Working Lifetime, subject to 19 years maximum	Outstanding contract term
Secondary rate – Note (d)	Monetary					
Treatment of surplus	Covered by stabilisation arrangement	Preferred approach: contributions kept at Primary rate. Reductions may be permitted by the Admin. Authority				Reduce contributions by spreading the surplus over the remaining contract term
Probability of achieving target – Note (e)	66%	70%	66%	75%	75%	66%
Phasing of contribution changes	Covered by stabilisation arrangement	3 years	3 years	3 years	None	None
Review of rates – Note (f)	Administering Authority reserves the right to review contribution rates and amounts, and the level of security provided, at regular intervals between valuations					Particularly reviewed in last 3 years of contract
New employer	n/a	n/a	Note (g)	Note (h)		Notes (h) & (i)
Cessation of participation: cessation debt payable	Cessation is assumed not to occur, as Scheduled Bodies are legally obliged to participate in the LGPS. In the rare event of cessation occurring (machinery of Government changes for example), the cessation debt principles applied would be as per Note (j).			Can be ceased subject to terms of admission agreement. Cessation debt will be calculated on a basis appropriate to the circumstances of cessation – see Note (j).		Participation is assumed to expire at the end of the contract. Cessation debt (if any) calculated on ongoing basis. Awarding Authority will be liable for future deficits and contributions arising.

Note (a) (Basis for CABs and Designating Employers closed to new entrants)

In the circumstances where:

- the employer is a Designating Employer, or an Admission Body but not a Transferee Admission Body, and
- the employer has no guarantor, and
- the admission agreement is likely to terminate, or the employer is likely to lose its last active member, within a timeframe considered appropriate by the Administering Authority to prompt a change in funding,

the Administering Authority may set a higher funding target (e.g. using a discount rate set equal to gilt yields) by the time the agreement terminates or the last active member leaves, in order to protect other employers in the Fund. This policy will increase regular contributions and reduce, but not entirely eliminate, the possibility of a final deficit payment being required from the employer when a cessation valuation is carried out.

The Administering Authority also reserves the right to adopt the above approach in respect of those Designating Employers and Admission Bodies with no guarantor, where the strength of covenant is considered to be weak but there is no immediate expectation that the admission agreement will cease or the Designating Employer alters its designation.

Note (b) (Stabilisation)

Stabilisation is a mechanism where employer contribution rate variations from year to year are kept within a pre-determined range, thus allowing those employers' rates to be relatively stable. In the interests of stability and affordability of employer contributions, the Administering Authority, on the advice of the Fund Actuary, believes that stabilising contributions can still be viewed as a prudent longer-term approach. However, employers whose contribution rates have been "stabilised" (and may therefore be paying less than their theoretical contribution rate) should be aware of the risks of this approach and should consider making additional payments to the Fund if possible.

This stabilisation mechanism allows short term investment market volatility to be managed so as not to cause volatility in employer contribution rates, on the basis that a long term view can be taken on net cash inflow, investment returns and strength of employer covenant.

The current stabilisation mechanism applies if:

- the employer satisfies the eligibility criteria set by the Administering Authority (see below) and;
- there are no material events which cause the employer to become ineligible, e.g. significant reductions in active membership (due to outsourcing or redundancies), or changes in the nature of the employer (perhaps due to Government restructuring), or changes in the security of the employer.

On the basis of extensive modelling carried out for the 2016 valuation exercise (see Section 4), the stabilised details are as follows:

Type of employer	**"Standard" Council**	**"Mature" Council**
Max cont increase	+0.75% of pay pa	+2.0% of pay pa
Max cont decrease	-0.75% of pay pa	-1.0% of pay pa

The stabilisation criteria and limits will be reviewed at the 31 March 2019 valuation, to take effect from 1 April 2020. However the Administering Authority reserves the right to review the stabilisation criteria and limits at any time before then, on the basis of membership and/or employer changes as described above.

The Administering Authority may review an employer's eligibility for stabilisation at any time in the event of significant changes in the employer's membership (due for example to redundancies or outsourcing) or if there is a significant change in the Administering Authority's assessment of an employer's security.

Stabilisation rules and eligibility may be reviewed at any time in the event of changes to scheme benefits. Changes in scheme benefits may arise because of changes in regulations or other events that have a material impact (such as the change in 2011 from RPI to CPI for increases to pensions in payment).

The stabilisation mechanism limits increases and reductions in contribution rates for public sector bodies. Therefore any emerging surplus will not reduce their contributions outside the pre-determined range.

Note (c) (Maximum time horizon)

The maximum time horizon starts at the commencement of the revised contribution rate (1 April 2017 for the 2016 valuation). The Administering Authority would normally expect the same period to be used at successive triennial valuations, but would reserve the right to propose alternative time horizons, for example where there were no new entrants.

Note (d) (Secondary rate)

The Secondary contribution for each employer covering the three year period until the next valuation will be collected as a monetary amount.

Note (e) (Probability of achieving funding target)

Each employer has its funding target calculated, and a relevant time horizon over which to reach that target. Contributions are set such that, combined with the employer's current asset share and anticipated market movements over the time horizon, the funding target is achieved with a given minimum probability. A higher required probability bar will give rise to higher required contributions, and vice versa.

The way in which contributions are set using these three steps, and relevant economic projections, is described in further detail in Appendix D.

Different probabilities are set for different employers depending on their nature and circumstances: in broad terms, a higher probability will apply due to one or more of the following:

- the Fund believes the employer poses a greater funding risk than other employers,
- the employer does not have tax-raising powers;
- the employer does not have a guarantor or other sufficient security backing its funding position; and/or
- the employer is likely to cease participation in the Fund in the short or medium term.

The Administering Authority may review an employer's probability at any time in the event of significant changes in the Administering Authority's assessment of an employer's security.

Note (f) (Regular Reviews)

Such reviews may be triggered by significant events including but not limited to: significant reductions in payroll, altered employer circumstances, Government restructuring affecting the employer's business, or failure to pay contributions or arrange appropriate security as required by the Administering Authority.

The result of a review may be to require increased contributions (by strengthening the actuarial assumptions adopted and/or moving to monetary levels of deficit recovery contributions), and/or an increased level of security or guarantee

Note (g) (New Academy conversions)

At the time of writing, the Fund's policies on academies' funding issues are as follows:

i. The new academy will be regarded as a separate employer in its own right and will not be pooled with other employers in the Fund. The only exception is where the academy is part of a Multi Academy Trust (MAT) in which case the academy's figures will be calculated as below but can be combined with those of the other academies in the MAT;

ii. The new academy's past service liabilities on conversion will be calculated based on its active Fund members on the day before conversion. For the avoidance of doubt, these liabilities will include all past service of those members, but will exclude the liabilities relating to any ex-employees of the school who have deferred or pensioner status;

iii. The new academy will be allocated an initial asset share from the ceding council's assets in the Fund. This asset share will be calculated using the estimated funding position of the ceding council at the date of academy conversion. The share will be based on the active members' funding level, having first allocated assets in the council's share to fully fund deferred and pensioner members. The asset allocation will be based on market conditions and the academy's active Fund membership on the day prior to conversion;

iv. The new academy's initial contribution rate will be calculated using market conditions, the council funding position and, membership data, all as at the day prior to conversion;

v. As an alternative to (iv), the academy will have the option to elect to pay contributions over the period to 31 March 2020 in line with the contribution rates detailed in the table below:

Year	Contribution rate (% of pay)
2017/18	TBC
2018/19	TBC
2019/20	TBC

The Fund's policies on academies are subject to change in the light of any amendments to DCLG guidance. Any changes will be notified to academies, and will be reflected in a subsequent version of this FSS. In particular, policies (iii), (iv) and (v) above will be reconsidered at each valuation.

Note (h) (New Admission Bodies)

With effect from 1 October 2012, the LGPS 2012 Miscellaneous Regulations introduced mandatory new requirements for all Admission Bodies brought into the Fund from that date. Under these Regulations, all new Admission Bodies will be required to provide some form of security, such as a guarantee from the letting employer, an indemnity or a bond. The security is required to cover some or all of the following:

- the strain cost of any redundancy early retirements resulting from the premature termination of the contract;
- allowance for the risk of asset underperformance;
- allowance for the risk of a fall in gilt yields;
- allowance for the possible non-payment of employer and member contributions to the Fund; and/or
- the current deficit.

Transferee Admission Bodies: For all TABs, the security must be to the satisfaction of the Administering Authority as well as the letting employer, and will be reassessed on an annual basis. See also Note (i) below.

Community Admission Bodies: The Administering Authority will only consider requests from CABs (or other similar bodies, such as section 75 NHS partnerships) to join the Fund if they are sponsored by a Scheduled Body with tax raising powers, guaranteeing their liabilities and also providing a form of security as above.

The above approaches reduce the risk, to other employers in the Fund, of potentially having to pick up any shortfall in respect of Admission Bodies ceasing with an unpaid deficit.

Note (i) (New Transferee Admission Bodies)

A new TAB usually joins the Fund as a result of the letting/outsourcing of some services from an existing employer (normally a Scheduled Body such as a council or academy) to another organisation (a “contractor”). This involves the TUPE transfer of some staff from the letting employer to the contractor. Consequently, for the duration of the contract, the contractor is a new participating employer in the Fund so that the transferring employees maintain their eligibility for LGPS membership. At the end of the contract the employees revert to the letting employer or to a replacement contractor.

Ordinarily, the TAB would be set up in the Fund as a new employer with responsibility for all the accrued benefits of the transferring employees; in this case, the contractor would usually be assigned an initial asset allocation equal to the past service liability value of the employees’ Fund benefits. The quid pro quo is that the contractor is then expected to ensure that its share of the Fund is also fully funded at the end of the contract: see Note (j).

Employers which “outsource” have flexibility in the way that they can deal with the pension risk potentially taken on by the contractor. In particular there are three different routes that such employers may wish to adopt. Clearly as the risk ultimately resides with the employer letting the contract, it is for them to agree the appropriate route with the contractor:

i) Pooling

Under this option the contractor is pooled with the letting employer. In this case, the contractor pays the same rate as the letting employer, which may be under a stabilisation approach.

ii) Letting employer retains pre-contract risks

Under this option the letting employer would retain responsibility for assets and liabilities in respect of service accrued prior to the contract commencement date. The contractor would be responsible for the future liabilities that accrue in respect of transferred staff. The contractor's contribution rate could vary from one valuation to the next. It would be liable for any deficit at the end of the contract term in respect of assets and liabilities attributable to service accrued during the contract term.

iii) Fixed contribution rate agreed

Under this option the contractor pays a fixed contribution rate and does not pay any cessation deficit.

The Administering Authority is willing to administer any of the above options as long as the approach is documented in the Admission Agreement as well as the transfer agreement. The Admission Agreement should ensure that some element of risk transfers to the contractor where it relates to their decisions and it is unfair to burden the letting employer with that risk. For example the contractor should typically be responsible for pension costs that arise from:

- above average pay increases, including the effect in respect of service prior to contract commencement even if the letting employer takes on responsibility for the latter under (ii) above; and
- redundancy and early retirement decisions.

Note (j) (Admission Bodies Ceasing)

Notwithstanding the provisions of the Admission Agreement, the Administering Authority may consider any of the following as triggers for the cessation of an admission agreement with any type of body:

- Last active member ceasing participation in the Fund (NB recent LGPS Regulation changes mean that the Administering Authority has the discretion to defer taking action for up to three years, so that if the employer acquires one or more active Fund members during that period then cessation is not triggered. The current Fund policy is that this is left as a discretion and may or may not be applied in any given case);
- The insolvency, winding up or liquidation of the Admission Body;
- Any breach by the Admission Body of any of its obligations under the Agreement that they have failed to remedy to the satisfaction of the Fund;
- A failure by the Admission Body to pay any sums due to the Fund within the period required by the Fund; or
- The failure by the Admission Body to renew or adjust the level of the bond or indemnity, or to confirm an appropriate alternative guarantor, as required by the Fund.

On cessation, the Administering Authority will instruct the Fund actuary to carry out a cessation valuation to determine whether there is any deficit or surplus. Where there is a deficit, payment of this amount in full would normally be sought from the Admission Body; where there is a surplus it should be noted that current legislation does not permit a refund payment to the Admission Body.

For non-Transferee Admission Bodies whose participation is voluntarily ended either by themselves or the Fund, or where a cessation event has been triggered, the Administering Authority must look to protect the interests of other ongoing employers. The actuary will therefore adopt an approach which, to the extent reasonably practicable, protects the other employers from the likelihood of any material loss emerging in future:

(a) Where a guarantor does not exist then, in order to protect other employers in the Fund, the cessation liabilities and final deficit will normally be calculated using a "gilts cessation basis", which is more prudent than the ongoing basis. This has no allowance for potential future investment outperformance above gilt yields, and has added allowance for future improvements in life expectancy. This could give rise to significant cessation debts being required.

(b) Where there is a guarantor for future deficits and contributions, the details of the guarantee will be considered prior to the cessation valuation being carried out. In some cases the guarantor is simply guarantor of last resort and therefore the cessation valuation will be carried out consistently with the approach taken had there been no guarantor in place. Alternatively, where the guarantor is not simply guarantor of last resort, the cessation may be calculated using the ongoing basis as described in Appendix E;

(c) Again, depending on the nature of the guarantee, it may be possible to simply transfer the former Admission Body's liabilities and assets to the guarantor, without needing to crystallise any deficit. This approach may be adopted where the employer cannot pay the contributions due, and this is within the terms of the guarantee.

Under (a) and (b), any shortfall would usually be levied on the departing Admission Body as a single lump sum payment. If this is not possible then the Fund would spread the payment subject to there being some security in place for the employer such as a bond indemnity or guarantee.

In the event that the Fund is not able to recover the required payment in full, then the unpaid amounts fall to be shared amongst all of the other employers in the Fund. This may require an immediate revision to the Rates and Adjustments Certificate affecting other employers in the Fund, or instead be reflected in the contribution rates set at the next formal valuation following the cessation date.

As an alternative, where the ceasing Admission Body is continuing in business, the Fund at its absolute discretion reserves the right to enter into an agreement with the ceasing Admission Body. Under this agreement the Fund would accept an appropriate alternative security to be held against any deficit, and would carry out the cessation valuation on an ongoing basis: deficit recovery payments would be derived from this cessation debt. This approach would be monitored as part of each triennial valuation: the Fund reserves the right to revert to a "gilts cessation basis" and seek immediate payment of any funding shortfall identified. The Administering Authority may need to seek legal advice in such cases, as the Body would have no contributing members.

3.4 Pooled contributions

From time to time, with the advice of the Actuary, the Administering Authority may set up pools for employers with similar or complementary characteristics. This will always be in line with its broader funding strategy.

With the advice of the Actuary the Administering Authority allows smaller employers of similar types to pool their contributions as a way of sharing experience and smoothing out the effects of costly but relatively rare events such as ill-health retirements or deaths in service.

Community Admission Bodies that are deemed by the Administering Authority to have closed to new entrants are not usually permitted to participate in a pool. Transferee Admission Bodies are usually also ineligible for pooling.

Smaller admitted bodies may be pooled with the letting employer, provided all parties (particularly the letting employer) agree.

Employers who are permitted to enter (or remain in) a pool at the 2016 valuation will not normally be advised of their individual contribution rate unless agreed by the Administering Authority.

Those employers which have been pooled are identified in the Rates and Adjustments Certificate.

3.5 Additional flexibility in return for added security

The Administering Authority may permit greater flexibility to the employer's contributions if the employer provides added security to the satisfaction of the Administering Authority.

Such flexibility includes a reduced rate of contribution, an extended time horizon, or permission to join a pool with another body (e.g. the Local Authority).

Such security may include, but is not limited to, a suitable bond, a legally-binding guarantee from an appropriate third party, or security over an employer asset of sufficient value.

The degree of flexibility given may take into account factors such as:

- the extent of the employer's deficit;
- the amount and quality of the security offered;
- the employer's financial security and business plan; and
- whether the admission agreement is likely to be open or closed to new entrants.

3.6 Non ill health early retirement costs

It is assumed that members' benefits are payable from the earliest age that the employee could retire without incurring a reduction to their benefit (and without requiring their employer's consent to retire). (**NB** the relevant age may be different for different periods of service, following the benefit changes from April 2008 and April 2014).

Employers are required to pay additional contributions ('strain') wherever an employee retires before attaining this age. The actuary's funding basis makes no allowance for premature retirement except on grounds of ill-health.

With the agreement of the Administering Authority the payment can be spread as follows:

Major Employing bodies	- up to 5 years
Community Admission Bodies and Designating Employers	- payable immediately
Academies	- payable immediately
Transferee Admission Bodies	- payable immediately

3.7 Ill health early retirement costs

In the event of a member's early retirement on the grounds of ill-health, a funding strain will usually arise, which can be very large. Such strains are currently met by each employer, although individual employers may elect to take external insurance (see 3.8 below).

Admitted Bodies will usually have an 'ill health allowance'; Scheduled Bodies may have this also, depending on their agreement terms with the Administering Authority. The Fund may monitor each employer's ill health experience on an ongoing basis. If the cumulative cost of ill health retirement in any financial year exceeds the allowance at the previous valuation, the employer may be charged additional contributions on the same basis as apply for non ill-health cases. Details will be included in each separate Admission Agreement.

3.8 External Ill health insurance

If an employer provides satisfactory evidence to the Administering Authority of a current external insurance policy covering ill health early retirement strains, then:

- the employer's contribution to the Fund each year is reduced by the amount of that year's insurance premium, so that the total contribution is unchanged, and
- there is no need for monitoring of allowances.

The employer must keep the Administering Authority notified of any changes in the insurance policy's coverage or premium terms, or if the policy is ceased.

3.9 Employers with no remaining active members

In general an employer ceasing in the Fund, due to the departure of the last active member, will pay a cessation debt on an appropriate basis (see 3.3, Note (j)) and consequently have no further obligation to the Fund. Thereafter it is expected that one of two situations will eventually arise:

a) The employer's asset share runs out before all its ex-employees' benefits have been paid. In this situation the other Fund employers will be required to contribute to pay all remaining benefits: this will be done by the Fund actuary apportioning the remaining liabilities on a pro-rata basis at successive formal valuations;

b) The last ex-employee or dependant dies before the employer's asset share has been fully utilised. In this situation the remaining assets would be apportioned pro-rata by the Fund's actuary to the other Fund employers.

In exceptional circumstances the Fund may permit an employer with no remaining active members to continue contributing to the Fund. This would require the provision of a suitable security or guarantee, as well as a written ongoing commitment to fund the remainder of the employer's obligations over an appropriate period. The Fund would reserve the right to invoke the cessation requirements in the future, however. The Administering Authority may need to seek legal advice in such cases, as the employer would have no contributing members.

3.10 Policies on bulk transfers

Each case will be treated on its own merits, but in general:

- The Fund will not pay bulk transfers greater than the lesser of (a) the asset share of the transferring employer in the Fund, and (b) the value of the past service liabilities of the transferring members;
- The Fund will not grant added benefits to members bringing in entitlements from another Fund unless the asset transfer is sufficient to meet the added liabilities; and
- The Fund may permit shortfalls to arise on bulk transfers if the Fund employer has suitable strength of covenant and commits to meeting that shortfall in an appropriate period. This may require the employer's Fund contributions to increase between valuations.

4 Funding strategy and links to investment strategy

4.1 What is the Fund's investment strategy?

The Fund has built up assets over the years, and continues to receive contribution and other income. All of this must be invested in a suitable manner, which is the investment strategy.

Investment strategy is set by the administering authority, after consultation with the employers and after taking investment advice. The precise mix, manager make up and target returns are set out in the Statement of Investment Principles (being replaced by an Investment Strategy Statement under new LGPS Regulations), which is available to members and employers.

The investment strategy is set for the long-term, but is reviewed from time to time. Normally a full review is carried out as part of each actuarial valuation, and is kept under review annually between actuarial valuations to ensure that it remains appropriate to the Fund's liability profile.

The same investment strategy is currently followed for all employers.

4.2 What is the link between funding strategy and investment strategy?

The Fund must be able to meet all benefit payments as and when they fall due. These payments will be met by contributions (resulting from the funding strategy) or asset returns and income (resulting from the investment strategy). To the extent that investment returns or income fall short, then higher cash contributions are required from employers, and vice versa

Therefore, the funding and investment strategies are inextricably linked.

4.3 How does the funding strategy reflect the Fund's investment strategy?

In the opinion of the Fund actuary, the current funding policy is consistent with the current investment strategy of the Fund. The asset outperformance assumption contained in the discount rate (see Appendix E3) is within a range that would be considered acceptable for funding purposes; it is also considered to be consistent with the requirement to take a "prudent longer-term view" of the funding of liabilities as required by the UK Government (see Appendix A1).

However, in the short term – such as the three yearly assessments at formal valuations – there is the scope for considerable volatility and there is a material chance that in the short-term and even medium term, asset returns will fall short of this target. The stability measures described in Section 3 will damp down, but not remove, the effect on employers' contributions.

The Fund does not hold a contingency reserve to protect it against the volatility of equity investments.

4.4 How does this differ for a large stable employer?

The Actuary has developed four key measures which capture the essence of the Fund's strategies, both funding and investment:

Prudence - the Fund should have a reasonable expectation of being fully funded in the long term;

Affordability – how much can employers afford;

Stewardship – the assumptions used should be sustainable in the long term, without having to resort to overly optimistic assumptions about the future to maintain an apparently healthy funding position; and

Stability – employers should not see significant moves in their contribution rates from one year to the next, to help provide a more stable budgeting environment.

The key problem is that the key objectives often conflict. For example, minimising the long term cost of the scheme (i.e. keeping employer rates affordable) is best achieved by investing in higher returning assets e.g. equities. However, equities are also very volatile (i.e. go up and down fairly frequently in fairly large moves), which conflicts with the objective to have stable contribution rates.

Therefore, a balance needs to be maintained between risk and reward, which has been considered by the use of Asset Liability Modelling: this is a set of calculation techniques applied by the Fund's actuary to model the range of potential future solvency levels and contribution rates.

The Actuary was able to model the impact of these four key areas, for the purpose of setting a stabilisation approach (see 3.3 Note (b)). The modelling demonstrated that retaining the present investment strategy, coupled with constraining employer contribution rate changes as described in 3.3 Note (b), struck an appropriate balance between the above objectives. In particular the stabilisation approach currently adopted meets the need for stability of contributions without jeopardising the Administering Authority's aims of prudent stewardship of the Fund.

Whilst the current stabilisation mechanism is to remain in place until 2020, it should be noted that this will need to be reviewed following the 2019 valuation.

4.5 Does the Fund monitor its overall funding position?

The Administering Authority monitors the relative funding position, i.e. changes in the relationship between asset values and the liabilities value, from time to time.

5 Statutory reporting and comparison to other LGPS Funds

5.1 Purpose

Under Section 13(4)(c) of the Public Service Pensions Act 2013 ("Section 13"), the Government Actuary's Department must, following each triennial actuarial valuation, report to the Department of Communities & Local Government (DCLG) on each of the LGPS Funds in England & Wales. This report will cover whether, for each Fund, the rate of employer contributions are set at an appropriate level to ensure both the solvency and the long term cost efficiency of the Fund.

This additional DCLG oversight may have an impact on the strategy for setting contribution rates at future valuations.

5.2 Solvency

For the purposes of Section 13, the rate of employer contributions shall be deemed to have been set at an appropriate level to ensure solvency if:

(a) the rate of employer contributions is set to target a funding level for the Fund of 100%, over an appropriate time period and using appropriate actuarial assumptions (where appropriateness is considered in both absolute and relative terms in comparison with other funds); and either

(b) employers collectively have the financial capacity to increase employer contributions, and/or the Fund is able to realise contingent assets should future circumstances require, in order to continue to target a funding level of 100%; or

(c) there is an appropriate plan in place should there be, or if there is expected in future to be, a material reduction in the capacity of fund employers to increase contributions as might be needed.

5.3 Long Term Cost Efficiency

The rate of employer contributions shall be deemed to have been set at an appropriate level to ensure long term cost efficiency if:

i. the rate of employer contributions is sufficient to make provision for the cost of current benefit accrual,

ii. with an appropriate adjustment to that rate for any surplus or deficit in the Fund.

In assessing whether the above condition is met, DCLG may have regard to various absolute and relative considerations. A relative consideration is primarily concerned with comparing LGPS pension funds with other LGPS pension funds. An absolute consideration is primarily concerned with comparing Funds with a given objective benchmark.

Relative considerations include:

1. the implied deficit recovery period; and
2. the investment return required to achieve full funding after 20 years.

Absolute considerations include:

1. the extent to which the contributions payable are sufficient to cover the cost of current benefit accrual and the interest cost on any deficit;
2. how the required investment return under “relative considerations” above compares to the estimated future return being targeted by the Fund’s current investment strategy;
3. the extent to which contributions actually paid have been in line with the expected contributions based on the extant rates and adjustment certificate; and
4. the extent to which any new deficit recovery plan can be directly reconciled with, and can be demonstrated to be a continuation of, any previous deficit recovery plan, after allowing for actual Fund experience.

DCLG may assess and compare these metrics on a suitable standardised market-related basis, for example where the local funds’ actuarial bases do not make comparisons straightforward.

Appendix A – Regulatory framework

A1 Why does the Fund need an FSS?

The Department for Communities and Local Government (DCLG) has stated that the purpose of the FSS is:

"to establish a ***clear and transparent fund-specific strategy*** *which will identify how employers' pension liabilities are best met going forward;*

to support the regulatory framework to maintain ***as nearly constant employer contribution rates as possible****; and*

to take a ***prudent longer-term view*** *of funding those liabilities."*

These objectives are desirable individually, but may be mutually conflicting.

The requirement to maintain and publish a FSS is contained in LGPS Regulations which are updated from time to time. In publishing the FSS the Administering Authority has to have regard to any guidance published by Chartered Institute of Public Finance and Accountancy (CIPFA) (most recently in 2016) and to its Statement of Investment Principles / Investment Strategy Statement.

This is the framework within which the Fund's actuary carries out triennial valuations to set employers' contributions and provides recommendations to the Administering Authority when other funding decisions are required, such as when employers join or leave the Fund. The FSS applies to all employers participating in the Fund.

A2 Does the Administering Authority consult anyone on the FSS?

Yes. This is required by LGPS Regulations. It is covered in more detail by the most recent CIPFA guidance, which states that the FSS must first be subject to "consultation with such persons as the authority considers appropriate", and should include "a meaningful dialogue at officer and elected member level with council tax raising authorities and with corresponding representatives of other participating employers".

In practice, for the Fund, the consultation process for this FSS was as follows:

a) A draft version of the FSS was issued to all participating employers in [DATE] for comment;

b) Comments were requested within [30] days;

c) Following the end of the consultation period the FSS was updated where required and then published, in [DATE].

A3 How is the FSS published?

The FSS is made available through the following routes:

Published on the website, at [CLIENT URL];

A copy sent by post/e-mail to each participating employer in the Fund;

A copy sent to employee/pensioner representatives;

A summary issued to all Fund members;

A full copy included in the annual report and accounts of the Fund;

Copies made available on request.

A4 How often is the FSS reviewed?

The FSS is reviewed in detail at least every three years as part of the triennial valuation. This version is expected to remain unaltered until it is consulted upon as part of the formal process for the next valuation in 2019.

It is possible that (usually slight) amendments may be needed within the three year period. These would be needed to reflect any regulatory changes, or alterations to the way the Fund operates (e.g. to accommodate a new class of employer). Any such amendments would be consulted upon as appropriate:

- trivial amendments would be simply notified at the next round of employer communications,
- amendments affecting only one class of employer would be consulted with those employers,
- other more significant amendments would be subject to full consultation.

In any event, changes to the FSS would need agreement by the Pensions Committee and would be included in the relevant Committee Meeting minutes.

A5 How does the FSS fit into other Fund documents?

The FSS is a summary of the Fund's approach to funding liabilities. It is not an exhaustive statement of policy on all issues, for example there are a number of separate statements published by the Fund including the Statement of Investment Principles/Investment Strategy Statement, Governance Strategy and Communications Strategy. In addition, the Fund publishes an Annual Report and Accounts with up to date information on the Fund.

These documents can be found on the web at [CLIENT URL].

Appendix B – Responsibilities of key parties

The efficient and effective operation of the Fund needs various parties to each play their part.

B1 The Administering Authority should:-

1. operate the Fund as per the LGPS Regulations;
2. effectively manage any potential conflicts of interest arising from its dual role as Administering Authority and a Fund employer;
3. collect employer and employee contributions, and investment income and other amounts due to the Fund;
4. ensure that cash is available to meet benefit payments as and when they fall due;
5. pay from the Fund the relevant benefits and entitlements that are due;
6. invest surplus monies (i.e. contributions and other income which are not immediately needed to pay benefits) in accordance with the Fund's Statement of Investment Principles/Investment Strategy Statement (SIP/ISS) and LGPS Regulations;
7. communicate appropriately with employers so that they fully understand their obligations to the Fund;
8. take appropriate measures to safeguard the Fund against the consequences of employer default;
9. manage the valuation process in consultation with the Fund's actuary;
10. provide data and information as required by the Government Actuary's Department to carry out their statutory obligations (see Section 5);
11. prepare and maintain a FSS and a SIP/ISS, after consultation;
12. notify the Fund's actuary of material changes which could affect funding (this is covered in a separate agreement with the actuary); and
13. monitor all aspects of the fund's performance and funding and amend the FSS and SIP/ISS as necessary and appropriate.

B2 The Individual Employer should:-

1. deduct contributions from employees' pay correctly;
2. pay all contributions, including their own as determined by the actuary, promptly by the due date;
3. have a policy and exercise discretions within the regulatory framework;
4. make additional contributions in accordance with agreed arrangements in respect of, for example, augmentation of scheme benefits, early retirement strain; and
5. notify the Administering Authority promptly of all changes to its circumstances, prospects or membership, which could affect future funding.

B3 The Fund Actuary should:-

1. prepare valuations, including the setting of employers' contribution rates. This will involve agreeing assumptions with the Administering Authority, having regard to the FSS and LGPS Regulations, and targeting each employer's solvency appropriately;
2. provide data and information as required by the Government Actuary's Department to carry out their statutory obligations (see Section 5);

3. provide advice relating to new employers in the Fund, including the level and type of bonds or other forms of security (and the monitoring of these);
4. prepare advice and calculations in connection with bulk transfers and individual benefit-related matters;
5. assist the Administering Authority in considering possible changes to employer contributions between formal valuations, where circumstances suggest this may be necessary;
6. advise on the termination of employers' participation in the Fund; and
7. fully reflect actuarial professional guidance and requirements in the advice given to the Administering Authority.

B4 Other parties:-

1. investment advisers (either internal or external) should ensure the Fund's SIP/ISS remains appropriate, and consistent with this FSS;
2. investment managers, custodians and bankers should all play their part in the effective investment (and dis-investment) of Fund assets, in line with the SIP/ISS;
3. auditors should comply with their auditing standards, ensure Fund compliance with all requirements, monitor and advise on fraud detection, and sign off annual reports and financial statements as required;
4. governance advisers may be appointed to advise the Administering Authority on efficient processes and working methods in managing the Fund;
5. legal advisers (either internal or external) should ensure the Fund's operation and management remains fully compliant with all regulations and broader local government requirements, including the Administering Authority's own procedures;
6. the Department for Communities and Local Government (assisted by the Government Actuary's Department) and the Scheme Advisory Board, should work with LGPS Funds to meet Section 13 requirements.

Appendix C – Key risks and controls

C1 Types of risk

The Administering Authority has an active risk management programme in place. The measures that it has in place to control key risks are summarised below under the following headings:

financial;

demographic;

regulatory; and

governance.

C2 Financial risks

Risk	Summary of Control Mechanisms
Fund assets fail to deliver returns in line with the anticipated returns underpinning the valuation of liabilities over the long-term.	Only anticipate long-term returns on a relatively prudent basis to reduce risk of under-performing. Assets invested on the basis of specialist advice, in a suitably diversified manner across asset classes, geographies, managers, etc. Analyse progress at three yearly valuations for all employers. Inter-valuation roll-forward of liabilities between valuations at whole Fund level.
Inappropriate long-term investment strategy.	Overall investment strategy options considered as an integral part of the funding strategy. Used asset liability modelling to measure 4 key outcomes. Chosen option considered to provide the best balance.
Fall in risk-free returns on Government bonds, leading to rise in value placed on liabilities.	Stabilisation modelling at whole Fund level allows for the probability of this within a longer term context. Inter-valuation monitoring, as above. Some investment in bonds helps to mitigate this risk.
Active investment manager under-performance relative to benchmark.	Quarterly investment monitoring analyses market performance and active managers relative to their index benchmark.
Pay and price inflation significantly more than anticipated.	The focus of the actuarial valuation process is on real returns on assets, net of price and pay increases. Inter-valuation monitoring, as above, gives early warning.

Risk	Summary of Control Mechanisms
	Some investment in bonds also helps to mitigate this risk. Employers pay for their own salary awards and should be mindful of the geared effect on pension liabilities of any bias in pensionable pay rises towards longer-serving employees.
Effect of possible increase in employer's contribution rate on service delivery and admission/scheduled bodies	An explicit stabilisation mechanism has been agreed as part of the funding strategy. Other measures are also in place to limit sudden increases in contributions.
Orphaned employers give rise to added costs for the Fund	The Fund seeks a cessation debt (or security/guarantor) to minimise the risk of this happening in the future. If it occurs, the Actuary calculates the added cost spread pro-rata among all employers – (see 3.9).

C3 Demographic risks

Risk	Summary of Control Mechanisms
Pensioners living longer, thus increasing cost to Fund.	Set mortality assumptions with some allowance for future increases in life expectancy. The Fund Actuary has direct access to the experience of over 50 LGPS funds which allows early identification of changes in life expectancy that might in turn affect the assumptions underpinning the valuation.
Maturing Fund – i.e. proportion of actively contributing employees declines relative to retired employees.	Continue to monitor at each valuation, consider seeking monetary amounts rather than % of pay and consider alternative investment strategies.
Deteriorating patterns of early retirements	Employers are charged the extra cost of non ill-health retirements following each individual decision. Employer ill health retirement experience is monitored, and insurance is an option.
Reductions in payroll causing insufficient deficit recovery payments	In many cases this may not be sufficient cause for concern, and will in effect be caught at the next formal valuation. However, there are protections where there is concern, as follows:

Risk	Summary of Control Mechanisms
	Employers in the stabilisation mechanism may be brought out of that mechanism to permit appropriate contribution increases (see Note (b) to 3.3). For other employers, review of contributions is permitted in general between valuations (see Note (f) to 3.3).

C4 Regulatory risks

Risk	Summary of Control Mechanisms
Changes to national pension requirements and/or HMRC rules e.g. changes arising from public sector pensions reform.	The Administering Authority considers all consultation papers issued by the Government and comments where appropriate. The results of the most recent reforms were built into the 2013 valuation. Any changes to member contribution rates or benefit levels will be carefully communicated with members to minimise possible opt-outs or adverse actions.
Time, cost and/or reputational risks associated with any DCLG intervention triggered by the Section 13 analysis (see Section 5).	Take advice from Fund Actuary on position of Fund as at prior valuation, and consideration of proposed valuation approach relative to anticipated Section 13 analysis.
Changes by Government to particular employer participation in LGPS Funds, leading to impacts on funding and/or investment strategies.	The Administering Authority considers all consultation papers issued by the Government and comments where appropriate. Take advice from Fund Actuary on impact of changes on the Fund and amend strategy as appropriate.

C5 Governance risks

Risk	Summary of Control Mechanisms
Administering Authority unaware of structural changes in an employer's membership (e.g. large fall in employee members, large number of retirements) or not advised of an employer closing to new entrants.	The Administering Authority has a close relationship with employing bodies and communicates required standards e.g. for submission of data. The Actuary may revise the rates and Adjustments certificate to increase an employer's contributions between triennial valuations Deficit contributions are expressed as monetary amounts.
Actuarial or investment advice is not sought, or is not heeded, or proves to be insufficient in some way	The Administering Authority maintains close contact with its specialist advisers. Advice is delivered via formal meetings involving Elected Members, and recorded appropriately. Actuarial advice is subject to professional requirements such as peer review.
Administering Authority failing to commission the Fund Actuary to carry out a termination valuation for a departing Admission Body.	The Administering Authority requires employers with Best Value contractors to inform it of forthcoming changes. Community Admission Bodies' memberships are monitored and, if active membership decreases, steps will be taken.
An employer ceasing to exist with insufficient funding or adequacy of a bond.	The Administering Authority believes that it would normally be too late to address the position if it was left to the time of departure. The risk is mitigated by: Seeking a funding guarantee from another scheme employer, or external body, where-ever possible (see Notes (h) and (j) to 3.3). Alerting the prospective employer to its obligations and encouraging it to take independent actuarial advice. Vetting prospective employers before admission. Where permitted under the regulations requiring a bond to protect the Fund from various risks. Requiring new Community Admission Bodies to have a guarantor.

Risk	Summary of Control Mechanisms
	Reviewing bond or guarantor arrangements at regular intervals (see Note (f) to 3.3). Reviewing contributions well ahead of cessation if thought appropriate (see Note (a) to 3.3).

Appendix D – The calculation of Employer contributions

In Section 2 there was a broad description of the way in which contribution rates are calculated. This Appendix considers these calculations in much more detail.

All three steps above are considered when setting contributions (more details are given in Section 3 and Appendix D:

1. The **funding target** is based on a set of assumptions about the future, eg investment returns, inflation, pensioners' life expectancies. However, if an employer is approaching the end of its participation in the Fund then its funding target may be set on a more prudent basis, so that its liabilities are less likely to be spread among other employers after its cessation of participation;

2. The **time horizon** required is, in broad terms, the period over which any deficit is to be recovered. A shorter period will lead to higher contributions, and vice versa (all other things being equal). Employers may be given a lower time horizon if they have a less permanent anticipated membership, or do not have tax-raising powers to increase contributions if investment returns under-perform;

3. The required **probability of achieving** the funding target over that time horizon will be dependent on the Fund's view of the strength of employer covenant and its funding profile. Where an employer is considered to be weaker, or potentially ceasing from the Fund, then the required probability will be set higher, which in turn will increase the required contributions (and vice versa).

The calculations involve actuarial assumptions about future experience, and these are described in detail in Appendix E.

D1 What is the difference between calculations across the whole Fund and calculations for an individual employer?

Employer contributions are normally made up of two elements:

a) the estimated cost of ongoing benefits being accrued, referred to as the "Primary contribution rate" (see D2 below); plus

b) an adjustment for the difference between the Primary rate above, and the actual contribution the employer needs to pay, referred to as the "Secondary contribution rate" (see D3 below).

The contribution rate for each employer is measured as above, appropriate for each employer's funding position and membership. The whole Fund position, including that used in reporting to DCLG (see section 5), is calculated in effect as the sum of all the individual employer rates. DCLG currently only regulates at whole Fund level, without monitoring individual employer positions.

D2 How is the Primary contribution rate calculated?

The Primary element of the employer contribution rate is calculated with the aim that these contributions will meet benefit payments in respect of members' **future** service in the Fund. This is based upon the cost (in excess of members' contributions) of the benefits which employee members earn from their service each year.

The Primary rate is calculated separately for all the employers, although employers within a pool will pay the contribution rate applicable to the pool as a whole. The Primary rate is calculated such that it is projected to:

1. meet the required funding target for all future years' accrual of benefits*, excluding any accrued assets,

2. within the determined time horizon (see note 3.3 Note (c) for further details),

3. with a sufficiently high probability, as set by the Fund's strategy for the category of employer (see 3.3 Note (e) for further details).

* The projection is for the current active membership where the employer no longer admits new entrants, or additionally allows for new entrants where this is appropriate.

The projections are carried out using an economic modeller developed by the Fund's actuary Hymans Robertson: this allows for a wide range of outcomes as regards key factors such as asset returns (based on the Fund's investment strategy), inflation, and bond yields. The measured contributions are calculated such that the proportion of outcomes meeting the employer's funding target (by the end of the time horizon) is equal to the required probability.

The approach includes expenses of administration to the extent that they are borne by the Fund, and includes allowances for benefits payable on death in service and on ill health retirement.

D3 How is the Secondary contribution rate calculated?

The combined Primary and Secondary rates aim to achieve the employer's funding target, within the appropriate time horizon, with the relevant degree of probability.

For the funding target, the Fund actuary agrees the assumptions to be used with the Administering Authority – see Appendix E. These assumptions are used to calculate the present value of all benefit payments expected in the future, relating to that employer's current and former employees, based on pensionable service to the valuation date only (i.e. ignoring further benefits to be built up in the future).

The Fund operates the same target funding level for all employers of 100% of its accrued liabilities valued on the ongoing basis, unless otherwise determined (see Section 3).

The Secondary rate is calculated as the balance over and above the Primary rate, such that the total is projected to:

1. meet the required funding target relating to combined past and future service benefit accrual, including accrued asset share (see D5 below)
2. within the determined time horizon (see 3.3 Note (c) for further details)
3. with a sufficiently high probability, as set by the Fund's strategy for the category of employer (see 3.3 Note (e) for further details).

The projections are carried out using an economic modeller developed by the Fund Actuary Hymans Robertson: this allows for a wide range of outcomes as regards key factors such as asset returns (based on the Fund's investment strategy), inflation, and bond yields. The measured contributions are calculated such that the proportion of outcomes with at least 100% solvency (by the end of the time horizon) is equal to the required probability.

D4 What affects a given employer's valuation results?

The results of these calculations for a given individual employer will be affected by:

1. past contributions relative to the cost of accruals of benefits;
2. different liability profiles of employers (e.g. mix of members by age, gender, service vs. salary);
3. the effect of any differences in the funding target, i.e. the valuation basis used to value the employer's liabilities;

4. any different time horizons;
5. the difference between actual and assumed rises in pensionable pay;
6. the difference between actual and assumed increases to pensions in payment and deferred pensions;
7. the difference between actual and assumed retirements on grounds of ill-health from active status;
8. the difference between actual and assumed amounts of pension ceasing on death;
9. the additional costs of any non ill-health retirements relative to any extra payments made; and/or
10. differences in the required probability of achieving the funding target.

D5 How is each employer's asset share calculated?

The Administering Authority does not account for each employer's assets separately. Instead, the Fund's actuary is required to apportion the assets of the whole Fund between the employers, at each triennial valuation.

This apportionment uses the income and expenditure figures provided for certain cash flows for each employer. This process adjusts for transfers of liabilities between employers participating in the Fund, but does make a number of simplifying assumptions. The split is calculated using an actuarial technique known as "analysis of surplus".

Actual investment returns achieved on the Fund between each valuation are applied proportionately across all employers, to the extent that employers in effect share the same investment strategy. Transfers of liabilities between employers within the Fund occur automatically within this process, with a sum broadly equivalent to the reserve required on the ongoing basis being exchanged between the two employers.

The Fund actuary does not allow for certain relatively minor events, including but not limited to:

1. the actual timing of employer contributions within any financial year;
2. the effect of the premature payment of any deferred pensions on grounds of incapacity.

These effects are swept up within a miscellaneous item in the analysis of surplus, which is split between employers in proportion to their liabilities.

The methodology adopted means that there will inevitably be some difference between the asset shares calculated for individual employers and those that would have resulted had they participated in their own ring-fenced section of the Fund.

The asset apportionment is capable of verification but not to audit standard. The Administering Authority recognises the limitations in the process, but it considers that the Fund actuary's approach addresses the risks of employer cross-subsidisation to an acceptable degree.

Appendix E – Actuarial assumptions

E1 What are the actuarial assumptions?

These are expectations of future experience used to place a value on future benefit payments ("the liabilities"). Assumptions are made about the amount of benefit payable to members (the financial assumptions) and the likelihood or timing of payments (the demographic assumptions). For example, financial assumptions include investment returns, salary growth and pension increases; demographic assumptions include life expectancy, probabilities of ill-health early retirement, and proportions of member deaths giving rise to dependants' benefits.

Changes in assumptions will affect the measured funding target. However, different assumptions will not of course affect the actual benefits payable by the Fund in future.

The combination of all assumptions is described as the "basis". A more optimistic basis might involve higher assumed investment returns (discount rate), or lower assumed salary growth, pension increases or life expectancy; a more optimistic basis will give lower funding targets and lower employer costs. A more prudent basis will give higher funding targets and higher employer costs.

E2 What basis is used by the Fund?

The Fund's standard funding basis is described as the "ongoing basis", which applies to most employers in most circumstances. This is described in more detail below. It anticipates employers remaining in the Fund in the long term.

However, in certain circumstances, typically where the employer is not expected to remain in the Fund long term, a more prudent basis applies: see Note (a) to 3.3.

E3 What assumptions are made in the ongoing basis?

a) Investment return / discount rate

The key financial assumption is the anticipated return on the Fund's investments. This "discount rate" assumption makes allowance for an anticipated out-performance of Fund returns relative to long term yields on UK Government bonds ("gilts"). There is, however, no guarantee that Fund returns will out-perform gilts. The risk is greater when measured over short periods such as the three years between formal actuarial valuations, when the actual returns and assumed returns can deviate sharply.

Given the very long-term nature of the liabilities, a long term view of prospective asset returns is taken. The long term in this context would be 20 to 30 years or more.

For the purpose of the triennial funding valuation at 31 March 2016 and setting contribution rates effective from 1 April 2017, the Fund actuary has assumed that future investment returns earned by the Fund over the long term will be 1.6% per annum greater than gilt yields at the time of the valuation (this is the same as that used at the 2013 valuation). In the opinion of the Fund actuary, based on the current investment strategy of the Fund, this asset out-performance assumption is within a range that would be considered acceptable for the purposes of the funding valuation.

b) Salary growth

Pay for public sector employees is currently subject to restriction by the UK Government until 2020. Although this “pay freeze” does not officially apply to local government and associated employers, it has been suggested that they are likely to show similar restraint in respect of pay awards. Based on long term historical analysis of the membership in LGPS funds, and continued austerity measures, the salary increase assumption at the 2016 valuation has been set to be a blended rate combined of:

1. 1% p.a. until 31 March 2020, followed by
2. 0.5% above the retail prices index (RPI) per annum p.a. thereafter.

This is a change from the previous valuation, which assumed a flat assumption of RPI plus 1.0% per annum. The change has led to a reduction in the funding target (all other things being equal).

c) Pension increases

Since 2011 the consumer prices index (CPI), rather than RPI, has been the basis for increases to public sector pensions in deferment and in payment. Note that the basis of such increases is set by the Government, and is not under the control of the Fund or any employers.

As at the previous valuation, we derive our assumption for RPI from market data as the difference between the yield on long-dated fixed interest and index-linked government bonds. This is then reduced to arrive at the CPI assumption, to allow for the “formula effect” of the difference between RPI and CPI. At this valuation, a reduction of 1.0% per annum has been applied. This is a larger reduction than at 2013, which will serve to reduce the funding target (all other things being equal). (Note that the reduction is applied in a geometric, not arithmetic, basis).

d) Life expectancy

The demographic assumptions are intended to be best estimates of future experience in the Fund based on past experience of LGPS funds which participate in Club Vita, the longevity analytics service used by the Fund, and endorsed by the actuary.

The longevity assumptions that have been adopted at this valuation are a bespoke set of “VitaCurves”, produced by the Club Vita’s detailed analysis, which are specifically tailored to fit the membership profile of the Fund. These curves are based on the data provided by the Fund for the purposes of this valuation.

It is acknowledged that future life expectancy and, in particular, the allowance for future improvements in life expectancy, is uncertain. There is a consensus amongst actuaries, demographers and medical experts that life expectancy is likely to improve in the future. Allowance has been made in the ongoing valuation basis for future improvements in line with the 2013 version of the Continuous Mortality Investigation model published by the Actuarial Profession and a 1.25% per annum minimum underpin to future reductions in mortality rates. This is a similar allowance for future improvements to that made in 2013.

The approach taken is considered reasonable in light of the long term nature of the Fund and the assumed level of security underpinning members’ benefits.

e) General

The same financial assumptions are adopted for most employers, in deriving the funding target underpinning the Primary and Secondary rates: as described in (3.3), these calculated figures are translated in different ways into employer contributions, depending on the employer’s circumstances.

The demographic assumptions, in particular the life expectancy assumption, in effect vary by type of member and so reflect the different membership profiles of employers.

Appendix F – Glossary

Actuarial assumptions/basis	The combined set of assumptions made by the actuary, regarding the future, to calculate the value of **the funding target**. The main assumptions will relate to the **discount rate**, salary growth, pension increases and longevity. More prudent assumptions will give a higher target value, whereas more optimistic assumptions will give a lower value.
Administering Authority	The council with statutory responsibility for running the Fund, in effect the Fund's "trustees".
Admission Bodies	Employers where there is an Admission Agreement setting out the employer's obligations. These can be Community Admission Bodies or Transferee Admission Bodies. For more details (see 2.3).
Covenant	The assessed financial strength of the employer. A strong covenant indicates a greater ability (and willingness) to pay for pension obligations in the long run. A weaker covenant means that it appears that the employer may have difficulties meeting its pension obligations in full over the longer term.
Designating Employer	Employers such as town and parish councils that are able to participate in the LGPS via resolution. These employers can designate which of their employees are eligible to join the Fund.
Discount rate	The annual rate at which future assumed cashflows (in and out of the Fund) are discounted to the present day. This is necessary to provide a **funding target** which is consistent with the present day value of the assets. A lower discount rate gives a higher target value, and vice versa. It is used in the calculation of the **Primary and Secondary rates**.
Employer	An individual participating body in the Fund, which employs (or used to employ) **members** of the Fund. Normally the assets and **funding target** values for each employer are individually tracked, together with its **Primary rate** at each **valuation**.
Funding target	The actuarially calculated present value of all pension entitlements of all **members** of the Fund, built up to date. This is compared with the present market value of Fund assets to derive the **deficit**. It is calculated on a chosen set of **actuarial assumptions**.
Gilt	A UK Government bond, ie a promise by the Government to pay interest and capital as per the terms of that particular gilt, in return for an initial payment of capital by the purchaser. Gilts can be "fixed interest", where the interest payments are level throughout the gilt's term, or "index-linked" where the interest payments vary each year in line with a specified index (usually RPI). Gilts can be bought as assets by the Fund, but their main use in funding is as an objective measure of solvency.
Guarantee / guarantor	A formal promise by a third party (the guarantor) that it will meet any pension obligations not met by a specified employer. The presence of a guarantor will mean, for instance, that the Fund can consider the employer's **covenant** to be as strong as its guarantor's.

Letting employer	An employer which outsources or transfers a part of its services and workforce to another employer (usually a contractor). The contractor will pay towards the LGPS benefits accrued by the transferring members, but ultimately the obligation to pay for these benefits will revert to the letting employer. A letting employer will usually be a local authority, but can sometimes be another type of employer such as an Academy.
LGPS	The Local Government Pension Scheme, a public sector pension arrangement put in place via Government Regulations, for workers in local government. These Regulations also dictate eligibility (particularly for Scheduled Bodies), members' contribution rates, benefit calculations and certain governance requirements. The LGPS is divided into 101 Funds which map the UK. Each LGPS Fund is autonomous to the extent not dictated by Regulations, e.g. regarding investment strategy, employer contributions and choice of advisers.
Maturity	A general term to describe a Fund (or an employer's position within a Fund) where the members are closer to retirement (or more of them already retired) and the investment time horizon is shorter. This has implications for investment strategy and, consequently, funding strategy.
Members	The individuals who have built up (and may still be building up) entitlement in the Fund. They are divided into actives (current employee members), deferreds (ex-employees who have not yet retired) and pensioners (ex-employees who have now retired, and dependants of deceased ex-employees).
Primary contribution rate	The employer contribution rate required to pay for ongoing accrual of active members' benefits (including an allowance for administrative expenses). See Appendix D for further details.
Profile	The profile of an employer's membership or liability reflects various measurements of that employer's **members**, ie current and former employees. This includes: the proportions which are active, deferred or pensioner; the average ages of each category; the varying salary or pension levels; the lengths of service of active members vs their salary levels, etc. A membership (or liability) profile might be measured for its **maturity** also.
Rates and Adjustments Certificate	A formal document required by the LGPS Regulations, which must be updated at least every three years at the conclusion of the formal **valuation.** This is completed by the actuary and confirms the contributions to be paid by each employer (or pool of employers) in the Fund for the three year period until the next valuation is completed.
Scheduled Bodies	Types of employer explicitly defined in the LGPS Regulations, whose employers must be offered membership of their local LGPS Fund. These include Councils, colleges, universities, academies, police and fire authorities etc, other than employees who have entitlement to a different public sector pension scheme (e.g. teachers, police and fire officers, university lecturers).

Secondary contribution rate	The difference between the employer's actual and **Primary contribution rates**. In broad terms, this relates to the shortfall of its asset share to its **funding target**. See Appendix D for further details.
Stabilisation	Any method used to smooth out changes in employer contributions from one year to the next. This is very broadly required by the LGPS Regulations, but in practice is particularly employed for large stable employers in the Fund. Different methods may involve: probability-based modelling of future market movements; longer deficit recovery periods; higher discount rates; or some combination of these.
Valuation	An actuarial investigation to calculate the liabilities, future service contribution rate and common contribution rate for a Fund, and usually individual employers too. This is normally carried out in full every three years (last done as at 31 March 2016), but can be approximately updated at other times. The assets value is based on market values at the valuation date, and the liabilities value and contribution rates are based on long term bond market yields at that date also.

2016 Valuation: Inflation Risk Premium

Scope and Purpose

This document has been requested by and is addressed to Warwickshire County Council ("the Council") in its capacity as Administering Authority to the Warwickshire Pension Fund ("the Fund"). It has been prepared by Hymans Robertson LLP to provide our view on whether the Fund should make allowance for an inflation risk premium when deriving the inflation assumption for the 2016 formal triennial valuation. This document has been specifically prepared to inform both the Fund's Officers and Investment Sub-Committee and help their decision making. It has not been prepared for use for any other purpose and should not be so used.

Background

We are currently carrying out a valuation of the Fund as at 31 March 2016. In order to carry out the valuation, actuarial assumptions are required to set an appropriate funding target.

The assumptions are informed estimates about future experience. We have proposed a set of assumptions for the 2016 valuation which we believe are appropriate for funding purposes. These assumptions were discussed at the Investment Sub-Committee meeting on 12 September 2016. During this meeting, there was discussion about whether allowance for an Inflation Risk Premium should be made when deriving the Retail Price Index ("RPI") inflation assumption. Any allowance for an Inflation Risk Premium would have an impact on the salary increase and pension increase assumption which are both set with reference to RPI inflation.

What is an 'Inflation Risk Premium'?

The principle behind an inflation risk premium is that:

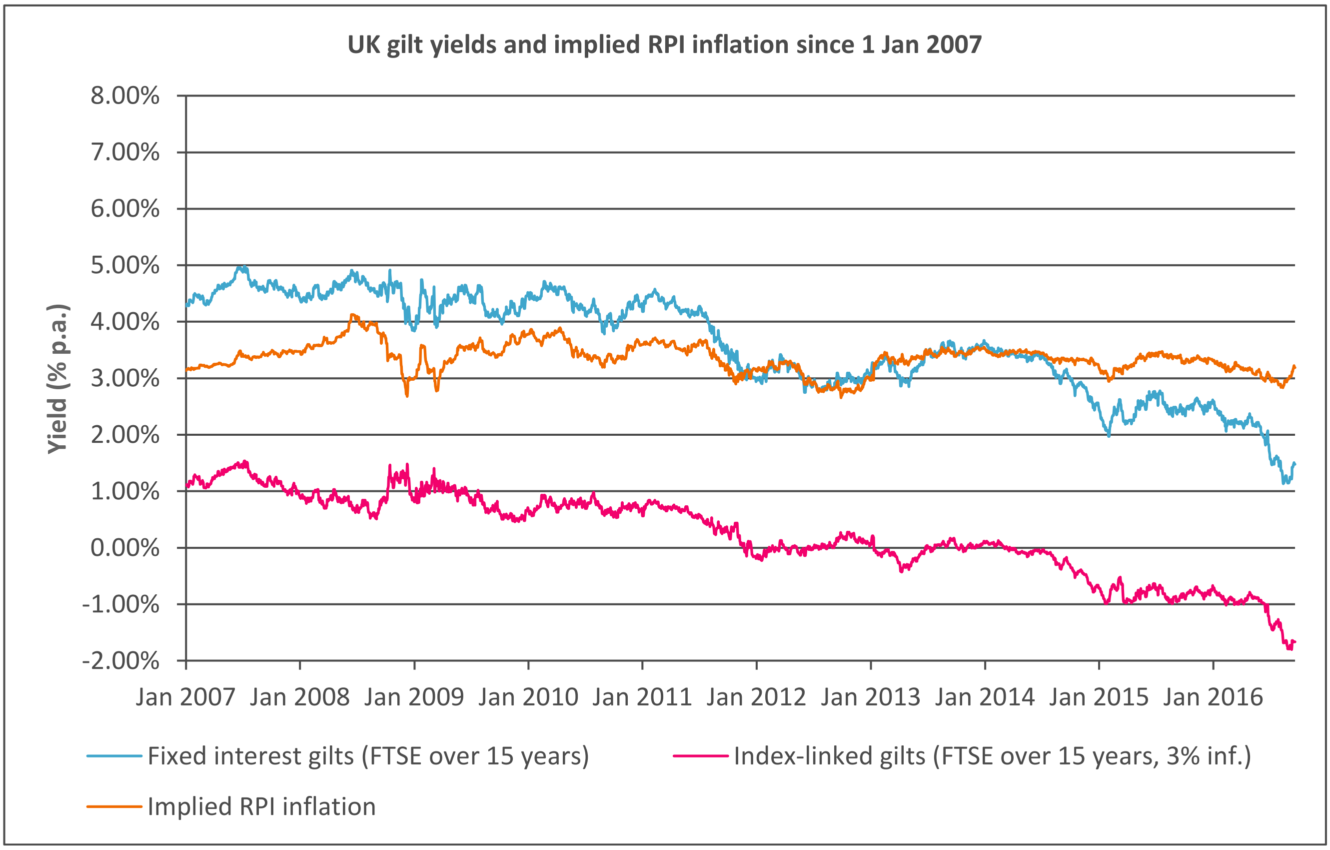
1. Implied future RPI inflation is derived from long term market gilt yields, specifically the difference (or gap) between the yield on fixed interest gilts and index-linked gilts. The difference between buying these two types of gilt is that the latter provides protection against changes in RPI.
2. Index-linked gilts are deemed to be over-priced to an extent, because investors are willing to pay a "risk premium" to achieve RPI inflation protection. Hence, the return (or yield) available from index-linked gilts is lower than it would otherwise be.
3. Fixed interest gilts are however not deemed to be subject to that reason for over-pricing, as they do not contain inflation-linking.
4. Therefore, combining (2) and (3), the difference between fixed interest and index-linked gilts appears wider than it should be, and the risk is that the RPI inflation assumption is over-stated if we simply take market yields as they stand.

The adoption of an Inflation Risk Premium counters this effect by, in essence, narrowing that difference to what it might have been had the Inflation Risk Premium not been priced into index-linked yields.

Should the Warwickshire Pension Fund make allowance for an Inflation Risk Premium?

Our general view is that we are sceptical whether this over-pricing of index-linked gilts exists in reality.

If over-pricing of index-linked gilts were true, then we would see a premium attached to index-linked gilts but not to fixed-interest gilts. For instance, in different market conditions investors would be willing to pay more or less for RPI protection than they would for simple safety in fixed interest gilts. However, analysis of yields over the past few years (see chart below) does not tend to support that view:



Other than the time of the banking crisis in late 2008/early 2009, you can see that the fixed interest yields (in blue) and index-linked yields (in red) are very closely correlated. This holds true in all manner of markets, from when nominal yields were around 5% to the current position where they are below 2%.

If an inflation risk premium existed, then we would expect to see changes in the relationship between the two yield lines reflecting the shifting needs of markets between RPI inflation protection and simple “flight to safety” purchasing of gilts. However, despite these varying conditions, the difference between the two (the orange line – market-implied RPI inflation) has remained fairly steady.

Furthermore, adoption of an Inflation Risk Premium would require the Fund to make a subjective choice for the value of any risk premium. It is best practice for any funding assumption to be evidence based. As we have discussed above, there is little evidence to use to help inform the choice of a risk premium value. Therefore, the Fund would be making a subjective decision with little evidence to back up the decision.

The use of an Inflation Risk Premium is not common amongst LGPS funds. However, its use is more prevalent amongst private sector pension schemes, where the typical premium may be 0.2% pa.

In summary, we are comfortable in assuming that long term RPI inflation rates can be determined by the difference between long term gilts yields, that this does not over-state the RPI inflation rate or the liabilities and there is no need to make allowance for an Inflation Risk Premium.

Reliances and limitations

This information is addressed to Warwickshire County Council as Administering Authority to the Warwickshire Pension Fund. It has been prepared in our capacity as actuaries to the Fund and is solely for the purpose of discussing whether, in our view, the Fund should make allowance for an inflation risk premium in the funding basis for the 2016 formal valuation. It has not been prepared for any other purpose and should not be used for any other purpose.

The Administering Authority is the only user of this advice. Neither we nor Hymans Robertson LLP accept any liability to any party other than the Administering Authority unless we have expressly accepted such liability in writing. The advice or any part of it must not be disclosed or released in any medium to any other third party without our prior written consent. In circumstances where disclosure is permitted, the advice may only be released or otherwise disclosed in its entirety fully disclosing the basis upon which it has been produced (including any and all limitations, caveats or qualifications).

The following Technical Actuarial Standards are applicable in relation to this advice, and have been complied with where material and to a proportionate degree:

- TAS R – Reporting; and
- Pensions TAS.

Prepared by:-

Richard Warden FFA

Robert Bilton FFA

22 September 2016

For and on behalf of Hymans Robertson LLP

Item 5

Pension Fund Investment Sub-Committee

12 December 2016

Pooling Update

Recommendation

The sub-committee is asked to note the report and make any comments.

1.0 Background

1.1 At the sub-committee meeting of 13 June 2016 it was agreed that the fund would set aside an initial provision of £50k as an initial contribution to the setting up of the Border to Coast Pensions Partnership (BCPP).

1.2 This report details spend to date and the next steps.

2.0 Spend to Date

2.1 The July submission to Government approved by all Partner Funds outlines that BCPP set up costs are expected to be up to £4.155m. The proposal also outlined that these costs were to be shared equally between the twelve Partner Funds expected to acquire an equal voting share. Current legal advice is that this company can be set up in shell form (i.e. with a generic set of articles of association) to enable the project to progress, prior to the formal creation of the Joint Committee or the detailed articles and reserved matters being agreed.

2.2 Each member fund had committed an initial £50k (£600k total) as 1.1. As at the end of September 2016 only £91k of this had been spent in total. At the BCPP Member Steering Group meeting on 24th June, all Partner Funds agreed that the remainder of this budget could be utilised to progress the project to the next stage. It was agreed that this would be up to receipt of support from Government to proceed.

3.0 Next Steps

3.1 At the BCPP Member Steering Group meeting of 30 September 2016 officers presented a report that requested each fund approves an additional £300k to appoint the various advisers to implement the project. On receipt of

Governmental support, the project will need to progress at speed to ensure it can meet the challenging timetable set by Government and approved by the Partner Funds in the submission.

3.2 The proposal was approved by the BCPP Member Steering Group at the meeting detailed in 3.1

3.3 There will be four tenders issued following Government approval of the July 2016 BCPP proposal to enable BCPP to complete the next phase of the project:

- A legal adviser to represent and work for the BCPP
- A legal adviser to represent the interests of the underlying member pension funds of BCPP
- An advisor to work on financial, tax and oversight of BCPP
- A specialist advisor to help with FCA requirements, ICT, procurement and operations needed in order for BCPP to become active from April 2018

3.4 The decision to commit to this expenditure is believed to be within the remit of all Partner Funds Pensions Committees. Officers at DCLG have confirmed that they consider this to be a cost of providing investment activity and as such that it is appropriate that it is chargeable directly to the Fund. Support for implementing this budgetary requirement does not create a legally binding commitment to enter the pool. However, once committed should a Partner Fund chose to withdraw from BCPP at a later date then it should be noted that these costs will not be reimbursed.

3.5 The Minister of State for Communities and Local Government will be meeting elected members and fund officers from each of the eight proposed asset pools to discuss various issues before formal Government approval is granted.

3.6 Given that original approval was meant to be given by September 2016 there could be implications for future key dates. Also as new investment regulations were only published in late September this will also have an impact. The first key event likely to be affected will be the need for Council to approve constitution change that allows for a joint committee structure and the BCPP Partnership Agreement in February. This could be further delayed due to Council elections in May 2017.

4.0 Future Cost Implications and Savings

4.1 With the share of total implementation costs estimate stated in 4.1, Warwickshire Pension Fund would be expected to break even in 2021/22. However this assumption includes accounting for transitioning assets from the fund to the pool that would be outside the pools control and are very hard to predict as it very much depends on market conditions.

4.2 On-going costs for BCPP, once implemented, are predicted to be £0.3m per annum for Warwickshire based on Warwickshire's proportion of total assets (£4.6m-£7.3m for the total pool).

4.3 In terms of the savings for the fund, taking the worst case scenario from the July submission to Government projects that by 2021 the fund will start achieving savings of £750k per annum.

4.4 The submission data calculated that the saving will then further increase in blocks of £100k per annum to a total of around £1.5m in 2028, (based on the funds current asset allocation).

4.5 These forecast savings are quantified in Table 1 below:

Table 1: Proposed Annual Savings for Warwickshire Pension Fund once pooled

£000 p.a	Asset Class
300	Passive Index Tracker (already achieved prior to BCPP)
350	Active Equity
200 - 1000	Alternative Investments

4.6 The savings on active equities would be achieved through benefits of economies of scale in BCPP external sub-funds, it does not assume internal management of Warwickshire's assets. Savings on alternatives will arise as a result of direct management of investments which would not incur two-tier or performance fees.

Background Papers

None

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