



Hertfordshire County Council Pension Fund Annual Report and Statement of Accounts 2017/18

	Page
➤ Introduction	
1. Foreword	2
2. Financial Summary	2
➤ Scheme Administration	
1. Background to the Scheme	3
2. Funding	3
3. Benefits	4
➤ Administering Authority Report	
1. Management	6
2. Governance Policy and Compliance Statement	7
3. Risk Management	12
4. Administration	12
5. Communication	15
6. Actuarial Valuation Report	17
7. Membership	19
➤ Financial Statements	
1. Statement of Responsibilities	21
2. Independent Auditor's Report	22
3. Fund Account	23
4. Net Assets Statement	24
5. Statement of Accounting Policies	25
6. Notes to the Accounts	29
➤ Investment Report	
1. Investment Management	50
2. Investment Strategy Statement	51
3. Investment Policy	59
4. Review of World Markets	61
5. Investment Performance	62
➤ Appendices	
1. List of Employing Bodies	66
2. Funding Strategy Statement	70
➤ Glossary to the Annual Report and Accounts	97

1. Foreword

This report provides information for employers and other interested parties on how the Hertfordshire Pension Fund ("Pension Fund") has been managed during the year 1 April 2017 to 31 March 2018.

This report summarises the main features of the Pension Fund, providing:

- a brief outline of the Local Government Pension Scheme ("Scheme")
- the Administering Authority Report which outlines the management and administrative arrangements for the Pension Fund
- the financial statements comprising of the Fund Account and Net Assets Statement for the year 2017/18 with comparative information for the previous year. The Fund Account shows the change in net assets available for benefits during the year. The Net Assets Statement discloses the net assets of the Pension Fund at 31 March 2018
- an Investment Report which sets out the Pension Fund's Investment Policy and the level of performance achieved.

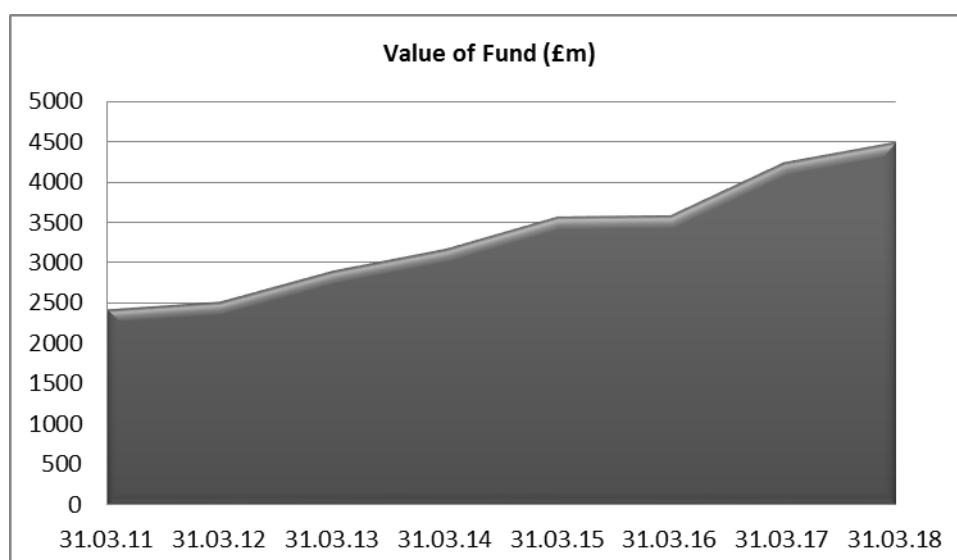
Over the year, the value of the Pension Fund increased from £4,243m at 31 March 2017 to £4,499m at 31 March 2018. The return achieved on the Pension Fund's investments during 2017/18 net of fees was 5.5% which reflected general market conditions over the year and above the benchmark return of 3.5%. A review of world markets is provided as part of the Investment report on page 61.

Over 2017/18 membership of the Pension Fund has continued to increase both in terms of the number of scheme employers and contributing members. The number of contributing members has increased from 33,447 at 31 March 2017 to 35,812 at 31 March 2018. The number of scheme employers also increased from 289 at 31 March 2017 to 320 at 31 March 2018 as a result of schools converting to academy status and new employers seeking admission to the Pension Fund following the outsourcing of service contracts from scheme employers.

2. Financial Summary

The table below provides a five year summary of the Pension Fund accounts and a graph showing the movement in the value of the Pension Fund over this period. This shows the net assets available to fund benefits at 31 March each year.

2013/14	2014/15	2015/16	2016/17		2017/18
£000s	£000s	£000s	£000s		£000s
2,907,904	3,175,783	3,581,039	3,584,250	Value of the Pension Fund at 1 April	4,243,371
39,045	(18,538)	13,430	23,978	Net additions / (withdrawals) from dealing with those directly involved in the scheme	27,532
(16,512)	(16,164)	(15,927)	(14,786)	Management expenses	(14,629)
245,346	439,958	5,708	649,930	Net returns on investments	242,744
267,879	405,256	3,211	659,121	Increase / (Decrease) in the Pension Fund during the year	255,646
3,175,783	3,581,039	3,584,250	4,243,371	Value of the Pension Fund at 31 March	4,499,017



1. Background to the Scheme

Legal Framework

The Scheme is a statutory scheme, established by Act of Parliament, the Superannuation Act 1972. The Scheme is governed by the Public Services Pensions Act 2013 and is administered in accordance with the following secondary legislation:

- Local Government Pension Scheme Regulations 2013 (as amended)
- Local Government Pension Scheme (Transitional Provisions, Savings & Amendment) Regulations 2014 (as amended)
- Local Government Pension Scheme (Management and Investment of Funds) Regulations 2016

The Scheme is run by administering authorities in accordance with these regulations. In Hertfordshire the Administering Authority is Hertfordshire County Council.

Eligibility

The Scheme is available to all employees of local authorities other than teachers, fire-fighters and police officers for whom separate arrangements apply. Employees are able to join the Scheme if they have a contract of employment of three months or more duration.

Other specified bodies providing public services are included by statute or may apply for admission.

Employers

At 31 March 2018 there were 320 employers in the Pension Fund. Participating employers can be scheduled bodies or admitted bodies, as defined below:

- **Scheduled bodies.** Employers such as the County Council (including maintained schools), Academies and District and Borough Councils, whose employees are automatically entitled to be members of the Fund.
- **Designated bodies.** Organisations such as Parish and Town Councils whose employees are able to join the Scheme if the employer designates that they can.
- **Admitted bodies.** These are voluntary, charitable and, in certain circumstances, private sector organisations carrying out scheduled bodies' contracts, where staff can become members of the Scheme by virtue of an Admission Agreement between the Pension Fund and the relevant body. At 31 March 2018 there were 129 admitted bodies participating in the Pension Fund.

A full list of employing bodies in the Pension Fund is shown in Appendix 1 at page 66.

The table below provides an analysis of scheduled and admitted bodies at 31 March 2018 and an analysis of active employers and employers that have ceased (these are employers with no active members but with outstanding liabilities). Admitted bodies may have more than one Admission Agreement in the Pension Fund relative to the service contracts they hold with scheduled bodies.

Type of Body	Active	Ceased	Total
Scheduled bodies	148	2	150
Designated bodies	38	3	41
Admitted bodies	53	76	129
Total	239	81	320

2. Funding

The Scheme is a funded scheme, financed by contributions from employees and employers and by earnings from investments. The Pension Fund has published a Funding Strategy Statement (shown in Appendix 2 at page 70, which sets out the Pension Fund's strategy for meeting employers' pension liabilities. The aim of the funding strategy is to ensure the long-term solvency of the Pension Fund and to ensure that sufficient funds are available to meet all benefits as they fall due for payment.

Employees' Contributions

During 2017/18, employees paid contributions at a rate based on their earnings, including contractual and non-contractual overtime and additional hours. From 1 April 2014, the Scheme moved from a final salary scheme to a career average revalued earnings (CARE) scheme. As part of the CARE scheme, employees can elect to move to the 50/50 option which allows employees to pay half the normal contributions in return for half the normal pension benefits.

The rates and salary bandings applicable during 2017/18 are shown in the table below.

Band	Range	Contribution Rate
1	£0 - £13,700.99	5.50%
2	More than £13,701 up to £21,400.99	5.80%
3	More than £21,401 up to £34,700.99	6.50%
4	More than £34,701 up to £43,900.99	6.80%
5	More than £43,901 up to £61,300.99	8.50%
6	More than £61,401 up to £86,800.99	9.90%
7	More than £86,801 up to £102,200.99	10.50%
8	More than £102,201 up to £153,300.99	11.40%
9	More than £153,300	12.50%

Employers' Contributions

Employers' contributions are payable at rates specified by the Pension Fund Actuary and are reviewed each triennial valuation. Rates are adjusted to reflect changes in the employer's membership profile and funding level in the Pension Fund (see page 17 for further details).

Investment Income

The cash, which is not immediately required to pay pensions and other benefits, is invested and provides an additional source of income for the Pension Fund.

Fund investments during 17/18 were governed by the 2017 Investment Strategy Statement (ISS) which details investment strategy, asset allocation, risk analysis, and the fund's approach to Environmental, Social and corporate Governance (ESG) considerations. The ISS is included from page 51.

3. Benefits

The Scheme is a salary-related defined benefit scheme which guarantees to provide benefits which are a specified fraction of a Scheme member's pay. Benefits are not affected by variations in investment performance.

Full details of benefits payable are explained in the Scheme booklet which is available from the Pension Fund website at <https://www.yourpension.org.uk/Hertfordshire/Information-for-members/Introduction.aspx>.

The following provides the main provisions of the benefit package for the Scheme.

Age of Retirement

The normal pension age in the Scheme is linked to State Pension Age, with a minimum of age 65. The Scheme also makes provisions for the early payment of benefits and members can choose to retire and draw their pension at any time from age 55. Benefits paid before normal pension age will be reduced to reflect that benefits will be paid over a longer period of time.

Retirement Benefits

From 1 April 2014, the Scheme moved from a final salary scheme to a career average revalued earnings (CARE) scheme details of which are accessible from the Pension Fund website at <https://www.yourpension.org.uk/Hertfordshire/Pensions-Home.aspx>.

For membership after 1 April 2014, members build up a pension at a rate of 1/49th of the amount of pensionable pay they receive in each scheme year. The amount of pension built up during the scheme year is added to their pension account and revalued at the end of each year in line with inflation. Up to 25% of the capital value of benefits can be taken as a lump sum at a 12:1 commutation rate, i.e. £12 lump sum for every £1 of annual pension given up.

Scheme Administration

Benefits built up before 1 April 2014 are protected and are calculated using membership in the Scheme prior to 1 April 2015 and the member's final pay when they leave the Scheme.

For membership built up between 1 April 2008 and 31 March 2014, the annual pension is based on final pensionable pay multiplied by $1/60^{\text{th}}$ for each year of Scheme membership. The final pensionable pay is the wage or salary on which contributions were paid over the last 12 months of service. Up to 25% of the capital value of benefits can be taken as a lump sum at a 12:1 commutation rate, i.e. £12 lump sum for every £1 of annual pension given up.

For membership accrued to 31 March 2008, members will receive an annual pension based on final pensionable pay multiplied by $1/80^{\text{th}}$ for each year of Scheme membership and a lump sum of three times annual pension. Up to 25% of the capital value of benefits can be taken as a lump sum at a 12:1 commutation rate, i.e. £12 lump sum for every £1 of annual pension given up.

Additional Benefits

The Scheme offers several ways for members to increase their benefits:

- Additional Pension Contributions to purchase additional Scheme pension benefits.
- Contributions to a money purchase Additional Voluntary Contribution scheme ("AVC"), provided by the Standard Life Assurance Company or the Equitable Life Assurance Society.

Ill Health Retirement

A three tier ill health retirement provision is available which is dependent on the likelihood of a member being capable of undertaking any gainful employment in the future. Benefits are calculated in the same way as for normal retirements, with an enhancement for members in tiers 1 and 2 to compensate for premature retirement. Members in tier 3 who are likely to be capable of undertaking gainful employment within three years of retiring must undergo a medical review after 18 months. At the end of the three year period the member will either have their pension benefits deferred to age 65 or move to tier 2 following a medical assessment.

Death in Service

A lump sum death grant of three year's assumed pensionable pay is payable. Pensions are also payable to surviving spouses, civil partners, or to eligible nominated co-habiting partners (subject to qualifying conditions) and dependent children.

Death after Retirement

Spouses', civil partners', eligible co-habiting partners' and dependent children's pensions are payable based on the former employee's pensionable pay or pension. In addition, if death occurred before the pension has been paid for ten years; the balance will be paid as a lump sum.

The benefits detailed above are guidelines only and members should apply to the Local Pensions Partnership, the Scheme Administrator, for individual estimates of benefits payable.

1. Management

Hertfordshire County Council (the "County Council") is the Administering Authority of the Pension Fund and administers the Scheme on behalf of the participating employers and members.

The Local Authority (Functions & Responsibilities) (England) Regulations 2000 (as amended), state that functions relating to the Scheme are the responsibility of the full Council. The County Council has delegated these functions to the Pensions Committee and to the County Council's Chief Finance Officer, the Director of Resources.

The membership of the Pensions Committee is made up of ten County Council members and two District Council representatives. All employers and a staff representative, nominated by UNISON, are invited to attend meetings as observers.

The Administering Authority has established a Pension Board in accordance with Section 5 of the Public Service Pensions Act 2013. The Board assists the Pension Fund in securing compliance with the Scheme regulations and other legal and regulatory requirements. The membership of the Pensions Board is made up of four employer representatives and four member representatives.

The Pension Fund's Governance Compliance Statement that was in force during 2017/18 is included on pages 7 - 11. This sets out the delegation of functions and terms of reference for the Pensions Committee and Pensions Board, and has been updated to reflect the impact of Asset Pooling within ACCESS. It also outlines the Pension Fund's compliance with statutory guidance issued by the Secretary of State for Communities and Local Government.

Pensions Committee Membership during 2017/18

County Council Members:

JD Williams (Chairman)	S Quilty	J King
CM Hayward (Vice-Chairman)	R Sangster	SJ Boulton
JM Graham	R Parker	
AJS Mitchell	S Drury	

District Council Representatives (non-voting):

K Ayling	M Freeman
----------	-----------

Pensions Committee Membership from 22 May 2018 (following committee restructure)

County Council Members:

R Sangster (Chairman)	S Quilty	M A Eames-Petersen
AJS Mitchell (Vice-Chairman)	CM Hayward	SJ Boulton
JM Graham	R Parker	
R C Deering	S Drury	

District Council Representatives (non-voting):

K Ayling	M Freeman
----------	-----------

Pensions Board Membership during 2017/18

Employer representatives:

D Ashley	D Graham
G Clay	P Neville (Chairman)

Member representatives:

D Devereux (left November 2017)	K Harding
J Digby (Vice-Chairman)	C Roberts

2. Governance Compliance Statement

This statement is prepared in accordance with regulation 55 of the Local Government Pension Scheme Regulations 2013, which require administering authorities to maintain and publish a governance compliance statement. It has been prepared by the Administering Authority in consultation with appropriate interested persons.

This statement was approved by the Pensions Committee on 4th September 2017.

Delegation of Functions

The Administering Authority for the Local Government Pension Scheme in Hertfordshire is Hertfordshire County Council (the "County Council"). Management of the Local Government Pension Scheme is a non-executive function.

The Local Authority (Functions & Responsibilities) (England) Regulations 2000 (as amended), state that the functions relating to the Local Government Pension Scheme are the responsibility of the full Council. The County Council has delegated these functions to the Pensions Committee, whose members can make decisions without reference to the full Council.

The Pensions Committee are responsible for the functions set out in the following regulations:

- Local Government Pension Scheme Regulations 2013
- Local Government Pension Scheme (Transitional Provisions, Savings & Amendment) Regulations 2014
- Local Government Pension Scheme (Management and Investment of Funds) Regulations 2016.

In parallel to this, the County Council has delegated functions relating to the Pension Fund to the County Council's Chief Finance Officer, the Director for Resources, as specified in Annex 3 of the County Council's Constitution.

The Pension Committee is supported by a cross-party working group consisting of four members (in proportion to the political representation of the full Council) from the Pension Committee, supported by officers and external advisors – such as the investment consultant. The remit of this group going forwards will be to support Officers with decisions required when transitioning to the new Investment Strategy, as well as support with other pension related matters where appropriate.

The County Council has established a Pension Board in accordance with Section 5 of the Public Service Pensions Act 2013. In accordance with Sections 5(1) and (2) of the Act and section 106 of the Local Government Pension Scheme regulations 2013, the role of the Board is to:

- Secure compliance with:
 - The Local Government Pensions Scheme regulations;
 - Other legislation relating to the governance and administration of the Local Government Pension Scheme; and
 - The requirements imposed by the Pension Regulator in relation to the Local Government Pension Scheme;

and to

- Ensure the effective and efficient governance and administration of the Local Government Pension Scheme.

Terms of Reference

The functions relating to the management and governance of the Pension Fund have been delegated as follows.

The Pensions Committee is responsible for policy matters including:

- Setting and monitoring performance objectives for the Pension Fund
- Approval and review of the overall investment strategy of the Pension Fund
- Approval and review of asset allocation decisions
- Performance monitoring Investment Managers and investments
- Appointing (and, when necessary, dismissing) Investment Managers*
- Appointing (and, when necessary, dismissing) Investment Consultants
- Appointing (and, when necessary, dismissing) the Pension Fund Actuary
- Appointing (and, when necessary, dismissing) the Pension Fund Custodian
- Setting and approving Administering Authority discretions for the Local Government Pension Scheme
- Approval of key policies and statements:
 - Investment Strategy Statement
 - Funding Strategy Statement
 - Governance Compliance Statement
 - Communications Strategy Statement
- Agreeing and monitoring actions to address findings from any review of Pension Fund activities

Administering Authority Report

*At present this responsibility sits with the Pension Committee, however as the national pooling of LGPS funds progresses, this responsibility will ultimately transfer to the operator of the ACCESS pool (A Collaboration of Central, Eastern and Southern Shires) - of which Hertfordshire is a member. The Pension Committee will still retain control over the asset allocation, and sub-funds utilised by the Operator of the Pool.

The primary governance function of the ACCESS pool is the Joint Governance Committee (JGC), which is made up of the chairs of each of the eleven funds within the ACCESS pool.

The ACCESS Joint Governance Committee is responsible for:

- Specifying the Operator services to be procured;
- Procuring the Operator;
- Appointing the Operator;
- Reviewing the performance of the Operator;
- Managing the Operator;
- Appointment of advisers;
- Functions in relation to management of pool assets;
- Functions concerning pool aligned assets; and
- Functions concerning business planning and budget.

The Pension Board is responsible for:

- Scrutinising the progress of actions to meet the performance objectives of the Pension Fund
- Reviewing and monitoring the training plan of the Pensions Board and elected members and officers with delegated responsibilities for the management and administration of the Pension Fund
- Reviewing and monitoring the performance of external business partners, including the pensions administration service, the actuary, the custodian and the investment consultant
- Reviewing and monitoring the Risk Register and risk monitoring of scheme employers
- Reviewing the implementation of revised policies and procedures, including the Administering Authority discretions
- Reviewing the compliance of projects commissioned by the Pensions Committee, including the Triennial Valuation of the Pension Fund
- Ensuring pension rules and regulations are being complied with, when officers are making decisions on pension matters
- Scrutinising data quality
- Reviewing internal audit reports
- Assisting in the development of improved customer services
- Reviewing compliance of Investment Managers with Investment Management Agreements
- Reviewing progress of agreed actions to address findings from any review of the Pension Fund activities.

All other operational decisions in the administration and management of the Pension Fund including exercising the Administering Authority's Discretions are delegated to the County Council's Chief Finance Officer, the Director of Resources.

Membership, Voting and Meetings

The membership, voting rights and frequency of meetings of the Pensions Committee and Pensions Board are set out in the table below:

	Pensions Committee	Pensions Board
Membership	Ten County Council members (in proportion to the political representation of the full Council) and three (non-voting) District Council representatives elected by the Hertfordshire Leaders' Group as outlined in Annex 3 (section 2.4) of the Hertfordshire County Council Constitution.	Four employer representatives and four member representatives
Chairman	Elected by full Council	Elected by the Pension Board and rotated annually between member and employer representatives
Observers	Staff representative, nominated by UNISON	

Administering Authority Report

Voting	County Council Members, as elected Members of the Administering Authority, have voting rights in accordance with the Local Government (Committee and Political Groups) Regulations 1990 SI No 1553 5 (1)(d).	All employer and member representatives have voting rights
Meetings per annum	Six	Four

Further information on the constitution of the Pension Board, including the appointment of employer and member representatives, standards and conflicts of interest can be found in Annex 23 of the County Council's Constitution.

Training

The Pensions Committee agreed a training policy for the Pensions Committee and Board at their meeting on 13 November 2015. This sets out the training principles and objectives of the Pension Fund, the application of the policy and details of how training will be delivered. This policy will be reviewed as part of the forward business plan for both the Pension Committee and Pension Board.

The Pension Board agreed a training programme for its members on 14th March 2017 within its Annual Report, which set out a schedule of modules based on CiPFA guidelines in order to meet the requirements for knowledge and understanding required by the Pensions Regulator.

Compliance with Statutory Guidance

The following table provides a summary of how the Pension Fund complies with the statutory guidance issued by the Secretary of State for Communities and Local Government.

Pension Fund Compliance Statement	
Principle	Compliance and Comments
A. Structure	
a) The management of the administration of benefits and strategic management of fund assets clearly rests with the main committee established by the appointment Council.	Full
b) That representatives of participating LGPS employers, admitted bodies and scheme members (including pensioner and deferred members) are members of either the main or secondary committee established to underpin the work of the main committee.	Full
c) That where a secondary committee or panel has been established, the structure ensures effective communication across both levels.	Not applicable
d) That where a secondary committee or panel has been established, at least one seat on the main committee is allocated for a member from the secondary committee or panel.	Not applicable

Pension Fund Compliance Statement	
Principle	Compliance and Comments
B. Representation	
a) That all key stakeholders are afforded the opportunity to be represented within the main or secondary committee structure. These include:	
i) employing authorities (including non-scheme employers, e.g. admitted bodies):	<p>Full</p> <p>The County and District Councils, whose employees make up 67% of the active membership, are represented on the Pensions Committee.</p> <p>The Pensions Board is made up of four employer representatives and four scheme member representatives</p>
ii) scheme members (including deferred and pensioner scheme members);	<p>Full</p> <p>UNISON has an observer place on the Pensions Committee to represent all Scheme members.</p>
iii) independent professional observers, and	<p>No – the Committee takes regular input from external professional advisors (see below). It is considered that an additional independent professional advisor would come at a cost, but not add significant value.</p>
iv) expert advisors (on an ad-hoc basis)	<p>Full</p> <p>The Pension Fund's Investment Adviser, Actuary and Administrator attend the Pensions Committee when appropriate.</p>
b) That where lay members sit on a main or secondary committee, they are treated equally in terms of access to papers and meetings, training and are given full opportunity to contribute to the decision making process, with or without voting rights	<p>Full</p>
C. Selection and Role of Lay Members	
a) That committee or panel members are made fully aware of the status, role and function they are required to perform on either a main or secondary committee.	<p>Full</p>
b) That at the start of any meeting, committee members are invited to declare any financial or pecuniary interest related to specific matters on the agenda.	<p>Full</p>
D. Voting	
a) The policy of individual administering authorities on voting rights is clear and transparent, including the justification for not extending voting rights to each body or group represented on main LGPS committees.	<p>Full</p> <p>The policy is clear that only County Council members can vote. The Pensions Committee believes that the voting arrangements are justified, because in practice the vast majority of decisions are reached by consensus.</p>

Pension Fund Compliance Statement	
Principle	Compliance and Comments
E. Training/Facility Time/Expenses	Full
a) That in relation to the way in which statutory and related decisions are taken by the administering authority, there is a clear policy on training, facility time and reimbursement of expenses in respect of members involved in the decision-making process.	Training is provided internally and externally and offered to all Pensions Committee and Board members. Reimbursement of expenses is covered by the members' allowance schemes in their authority.
b) That where such a policy exists, it applies equally to all members of committees, sub-committees, advisory panels or any other form of secondary forum.	Full
c) That the administering authority considers the adoption of annual training plans for committee members and maintains a log of all such training undertaken.	Full
F. Meetings (frequency/quorum)	
a) That an administering authority's main committee or committees meet at least quarterly.	Full
b) That an administering authority's secondary committee or panel meet at least twice a year and is synchronised with the dates when the main committee sits.	Not applicable
c) That administering authorities who do not include lay members in their formal governance arrangements, provide a forum outside of those arrangements by which the interests of key stakeholders can be represented.	Full An annual employers' forum is held to update employers on Pension Fund matters.
G. Access	
a) That subject to any rules in the council's constitution, all members of main and secondary committees or panels have equal access to committee papers, documents and advice that falls to be considered at meetings of the main committee.	Full
H. Scope	
a) That administering authorities have taken steps to bring wider scheme issues within the scope of their governance arrangements.	Full
I. Publicity	
a) That administering authorities have published details of their governance arrangements in such a way that stakeholders with an interest in the way in which the scheme is governed, can express an interest in wanting to be part of those arrangements.	Full

3. Risk Management

Responsibility for the risk management of the Pension Fund rests with the Pensions Committee and is assisted by the Pensions Board in the monitoring of risks.

Key risks are incorporated in the Pension Fund's Risk Register, which was approved by the Pensions Committee on 7 March 2017 as part of the Funding Strategy Statement.

Four key risks to the Pension Fund have been identified:

- The Pension Fund's Investment Strategy does not deliver the long term projected investment returns and/or does not comply with legislation.
- The funding level of the Pension Fund deteriorates.
- Employers default on meeting their obligations to the Pension Fund and the Scheme.
- The Pension Fund and its third party providers do not comply with regulations, statute or procedure.

A number of underlying risk control mechanisms are in place that aim to manage these risks and these are detailed in the Funding Strategy Statement on page 70. Risks are monitored on a regular basis and quarterly reports are presented to the Pensions Committee and Board, providing an update on the status of these risks. The quarterly reports and minutes of the Pensions Committee and Board meetings are accessible from <https://cmis.hertfordshire.gov.uk/hertfordshire/Calendarofcouncilmeetings.aspx>.

Investment risk and return objectives for the Pension Fund are set out in the Investment Strategy which is reviewed at regular intervals to ensure that it will achieve the objectives. Note 6.15 of the Financial Statements provides details on the nature and extent of risks arising from financial instruments and how these are managed.

Employers are monitored against a risk monitoring framework that aims to identify employers at an early stage who are at risk of defaulting on their obligations to the Pension Fund. A quarterly update is provided to the Pensions Committee and Board.

4. Administration

Hertfordshire County Council is the Administering Authority of the Pension Fund and administers the Scheme in conjunction with the contracted business services listed below.

Scheme Administrator providing scheme administration services for members in conjunction with the County Council:

- Local Pensions Partnership (LPP)

Investment Managers during 2017/18 investing funds on behalf of the Pension Fund:

- Allianz Global Investors Europe GmbH
- Baillie Gifford & Co.
- CBRE Global Collective Investors (UK) Limited
- HarbourVest Partners, LLC
- Henderson Global Investors Limited
- Jupiter Asset Management Limited
- LGT Capital Partners (Ireland) Limited
- Legal & General Assurance (Pensions Management) Limited
- Pantheon Ventures UK LLP
- Permira Advisers, LLP
- Royal London Asset Management Limited
- Standard Life Investments Limited
- UBS Group AG

Custodian maintaining and managing investment records and safeguarding the Pension Fund's assets:

- BNY Mellon Asset Servicing B.V.

Consulting Actuary providing actuarial services:

- B McKay, Fellow of the Institute and Faculty of Actuaries, for and on behalf of Hymans Robertson LLP

Administering Authority Report

Investment Consultant providing investment advice:

- Mercer Limited

Corporate Governance Adviser providing voting services:

- Research, Recommendations and Electronic Voting Limited

Performance Measurement Consultants providing independent reporting on investment performance:

- BNY Mellon Asset Servicing B.V.

Additional Voluntary Contributions providers for members wishing to increase benefits:

- The Equitable Life Assurance Society
- Standard Life Assurance Company

External Auditor:

- Neil Harris, for and on behalf of Ernst & Young LLP

Banker:

- Barclays Bank, plc

Legal advisor:

Squire Patton Boggs (UK) LLP

The Pension Fund is a member or subscriber of the following bodies:

- Local Authority Pension Fund Forum
- Local Government Pension Committee
- Pension and Lifetime Savings Association

Key contacts

Administering Authority

For Investments

Patrick Towey
Herts Finance Service
Hertfordshire County Council
Postal Point CHO 327
County Hall, Pegs Lane
Hertford, SG13 8DQ

01992 555148

pensions.team@hertfordshire.gov.uk

Legal Adviser

Kathryn Pettitt
Chief Legal Officer, Hertfordshire County Council

Scheme Administrator

For Benefits and Administration

Taryn Mutter
Local Pensions Partnership
Hertfordshire Pension Team
Postal Point CHO 033
County Hall, Pegs Lane
Hertford, SG13 8DQ

01992 555466

hertscc@localpensionspartnership.org.uk

Administration Strategy

The Pension Fund has published an Administration Strategy ("Strategy") that sets out the responsibilities of the Pension Fund and employers and defines the required performance standards expected of the Pension Fund and its employers and also provides details of the charges that will be levied for non-compliance.

The Strategy has been prepared in accordance with regulation 59 of the Local Government Pension Scheme Regulations 2013 (as amended). This enables a Local Government Pension Scheme Fund to prepare an administration strategy to support the delivery of a high quality administration service.

The Strategy was produced in consultation with employers and subsequent revisions are made in consultation with employers and approved by the Pensions Committee. The latest version was approved by the Pensions Committee on 27 February 2015 and implemented on 1 April 2015 and is accessible from the Pension Fund website at: <http://www.yourpension.org.uk/Hertfordshire/Fund-information/Policy-statements.aspx>.

Administering Authority Report

Annual Performance Report

A set of key performance indicators has been agreed and approved by the Pensions Committee and these are used to measure and report on the performance of the Administering Authority, the outsourced pensions administration service provider LPP and employers. Performance is reported to the Pensions Committee and Board on a quarterly basis and the reports and minutes from these meetings are accessible from:

<http://cmis.hertfordshire.gov.uk/hertfordshire/CabinetandCommittees.aspx>.

Performance of the Administering Authority

The following table provides details of the Pension Fund's management costs shown as a unit cost per member (contributors, deferred and pensioner) and as a percentage of Net Assets, with comparative data for 2016/17.

	2016/17	2017/18	Trend
Total management costs per member	£149.31	£149.03	▼
Administrative expenses per member	£15.74	£15.70	▼
Total management costs as a percentage of Net Assets	0.35%	0.35%	►

The Administering Authority is measured against performance and compliance with statutory requirements placed on administering authorities for the administration of pension funds. Performance of the Administering Authority is reviewed by periodic Internal Audit review and by the volume of complaints or internal disputes raised against the Administering Authority. The following provides details of performance for 2017/18:

- The annual external audit was carried out between February and July 2017 by Ernst & Young LLP. This reviewed the 2016/17 Annual Report and Accounts to provide a true and fair opinion on the financial statements. Ernst & Young LLP issued a positive Audit Results Report with no recommendations for improvements.
- The annual assurance audit was carried out between November 2017 and January 2018 by the Shared Internal Audit Service. The audit reviewed controls and procedures for pensions administration. The audit report was issued in January 2018 with substantial assurance that effective controls are in operation.
- As part of the annual external review of the 2017/18 Annual Report and Accounts, during February - March 2018, Ernst & Young LLP carried out an assessment of internal controls. Ernst & Young LLP's findings from the assessment will be published in July 2018 as part of the 2017/18 Audit Results Report for the Pension Fund.
- During 2017/18 there were five Internal Disputes against the Administering Authority; one of these was upheld and four were not upheld. A copy of the internal disputes resolution procedure is accessible from the Pension Fund website, <http://www.yourpension.org.uk/Hertfordshire/Information-for-members/Customer-Care-Complaints>
- The Pension Fund achieved the statutory deadline of 31 August 2017 for the issue of the 2017 Annual Benefit Statements for 100% of members.

Performance of the Pensions Administration Service

Performance of the pensions administration service delivered by the LPP is measured against targets set out in the Service Level Agreement and against the number of complaints raised about service delivery. The following provides details of performance for 2017/18:

- During 2017/18, 13 complaints were received; ten of these were upheld and resolved, and three were not upheld.
- Efficiency of the pensions administration service is measured against Service Level Agreement performance targets which are monitored and reported on a monthly basis. The following chart sets out results for 2017/18 for key service tasks.

Pensions Administration Task	Annual Total	Standard ¹	Within Standard
Joiners to the LGPS	3,118	6 working days	97.34%
Pensions transfers in and out	3,394	6 working days	99.39%
Processing pensions benefits for retirements and deaths	4,271	5 working days	79.51%
Providing deferred members with a benefit statement	6,099	30 working days	43.63% ²
Processing refunds of pensions contributions	1,651	5 working days	88.13%
Providing estimates of retirement benefits	3,138	5 working days	82.22%

¹ From receipt of accurate information

² Performance in relation to the provision of deferred member benefit statements is being managed under a project to improve timely notification of leavers by scheme employers.

Performance of Employers

Employers' performance in administering the Scheme is measured against targets set out in the Administration Strategy and compliance with performance standards. The following provides details of performance for 2017/18:

- A total of 28 charges were levied against 22 employers (9.2% of active employers) for late submission of contribution returns or late payment of monthly contributions for contributions. Interest was levied on employers for late payment of contributions in accordance with regulation 70 of the Local Government Pension Scheme Regulations 2013 (as amended).
- 85% of active employers paid contributions by the due date each month.
- 74% of active employers submitted monthly contribution returns by the due date.

To ensure compliance with the statutory deadline for the issue of the 2017/18 Annual Benefit Statements to LGPS members, the Pension Fund worked with scheme employers to ensure they understood their responsibilities under the Scheme and the sanctions that may apply if requirements were not met and implemented a communication plan for advising scheme employers of the requirements, timescales and support available.

5. Communication

The Pension Fund has published a Communication Policy Statement which sets out how it communicates with employers and representatives of employers, Scheme members and prospective Scheme members. It was approved by the Pensions Committee on 4th September 2017.

Communication Policy Statement

This Statement is prepared in accordance with Regulation 61 of the Local Government Pension Scheme Regulations 2013, which requires an Administering Authority to prepare, maintain and publish a statement on its policy for communicating with members and employing authorities.

Employers

The following methods are used to communicate with employers in the Pension Fund:

- **Annual General Meeting/Employer Forum**
All employers are invited to attend, to listen to presentations on topical issues and to raise questions about the Pension Fund.
- **Quarterly Employer Newsletters and Ad Hoc Bulletins**
All employers receive quarterly newsletters which provide information, advice and guidance about administering the Scheme. Ad hoc bulletins are also published to advise employers about specific issues that require attention or action e.g. changes to Scheme regulations.
- **Annual Report and Accounts**
A copy of this publication is sent to all employers and is available from the Pension Fund's website: <https://www.yourpension.org.uk/Hertfordshire/Fund-information/Annual-reports.aspx>
- **Hertfordshire Chief Finance Officers' Meeting**
The Assistant Director (Finance) for the County Council keeps in contact with the District and Borough Councils through these meetings and keeps them up to date with pension matters.
- **Pension Committee Reports and Minutes**
These are available to employers and members who wish to review them, from the Hertfordshire County Council website: <http://cmis.hertfordshire.gov.uk/hertfordshire/CabinetandCommittees.aspx>
- **Pension Board Reports and Minutes**
These are available to employers and members who wish to review them, from the Hertfordshire County Council website: <http://cmis.hertfordshire.gov.uk/hertfordshire/CabinetandCommittees.aspx>
- **Guidance and Help**
Hertfordshire County Council staff and the Local Pensions Partnership (LPP), the Pension Fund's outsourced scheme administrator, are available to give advice on the telephone, by letter or by email. Comprehensive information and guidance is also accessible from the Pension Fund website: <https://www.yourpension.org.uk/Hertfordshire/Pensions-Home.aspx>

Scheme Members*

The following methods are used to communicate with Scheme members:

Administering Authority Report

- **Telephone Helpline**

The LPP provide a telephone helpline for all enquiries from Scheme members on any aspect of their pension arrangements.

- **Annual Benefit Statements**

All active and deferred Scheme members receive an Annual Benefit Statement (ABS) setting out the level of benefits that have been built-up, along with a forecast of benefits at retirement.

- **Internet**

The Pension Fund's website provides information about Scheme benefits. Scheme members may also have access to information about their pension benefits by subscribing to an online service.

- **Information Letters**

Information about changes in regulations is provided to employees via their employers in a range of media, including e-mail and letter.

- **Payslips**

All pensioners receive at least three payslips each year and messages are included whenever there is new information to be communicated.

- **Newsletter for Pensioners**

An annual newsletter is mailed to pensioners and two in-year newsletters are published and are accessible from the Pension Fund website.

*The scheme is seeking to move to electronic means of communication with members, as opposed to paper copies, where possible. This will include online self-service, as well as e-mail communications, notifications and alerts. Before changing the medium of a particular communication the Fund is required to provide members with two written notices to that effect, as well as provide the opportunity for members to opt-out of electronic communication, and continue to receive paper copies. In future ABS Statements, Payslips and Pensioner Newsletters will be provided electronically unless members opt-out.

Prospective Scheme Members

The methods used to ensure that prospective members are aware of the Scheme and its benefits are:

- **Job Advertisements**

Many employers advertise the benefits of the Scheme in their job advertisements.

- **Scheme Booklet**

All new starters in the employing organisations in the Pension Fund are provided with a Scheme booklet which summarises the benefits available from the Pension Fund.

- **Induction Sessions**

Employers in the Pension Fund are encouraged to include pensions in their induction sessions for new starters.

6. Actuarial Valuation Report

The Pension Fund is financed by contributions from employees and employers and by investment income earned on accumulated funds not immediately required for the payment of benefits and expenses. The Pension Fund Actuary reports periodically to the County Council on the Pension Fund's solvency and to identify the contributions payable by employers to the Pension Fund in the future to meet the funding objectives of the Pension Fund.

The Pension Fund has published a Funding Strategy Statement (see page 70), which sets out the Pension Fund's strategy for meeting employers' pension liabilities. The aim of the funding strategy is to ensure the long-term solvency of the Pension Fund and to ensure that sufficient funds are available to meet all benefits as they fall due for payment. The Pension Fund Actuary takes account of the Funding Strategy Statement when advising on the level of employer contributions to be paid.

Actuarial Statement for 2017/18 Provided by Hymans Robertson LLP

This statement has been prepared in accordance with Regulation 57(1)(d) of the Local Government Pension Scheme Regulations 2013. It has been prepared at the request of the Administering Authority of the Fund for the purpose of complying with the aforementioned regulation.

Description of Funding Policy

The funding policy is set out in the Administering Authority's Funding Strategy Statement (FSS), dated February 2017. In summary, the key funding principles are as follows:

- 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;
- 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.

The FSS sets out how the Administering Authority seeks to balance the conflicting aims of securing the solvency of the Fund and keeping employer contributions stable. For employers whose covenant was considered by the Administering Authority to be sufficiently strong, contributions have been stabilised to return their portion of the Fund to full funding over 20 years if the valuation assumptions are borne out. Asset-liability modelling has been carried out which demonstrate that if these contribution rates are paid and future contribution changes are constrained as set out in the FSS, there is at least a 66% chance that the Fund will return to full funding over 20 years.

Funding Position as at the last formal funding valuation

The most recent actuarial valuation carried out under Regulation 62 of the Local Government Pension Scheme Regulations 2013 was as at 31 March 2016. This valuation revealed that the Fund's assets, which at 31 March 2016 were valued at £3,584 million, were sufficient to meet 91% of the liabilities (i.e. the present value of promised retirement benefits) accrued up to that date. The resulting deficit at the 2016 valuation was £336 million.

Each employer had contribution requirements set at the valuation, with the aim of achieving full funding within a time horizon and probability measure as per the FSS. Individual employers' contributions for the period 1 April 2017 to 31 March 2020 were set in accordance with the Fund's funding policy as set out in its FSS.

Principal Actuarial Assumptions and Method used to value the liabilities

Full details of the methods and assumptions used are described in the 2016 valuation report.

Method

The liabilities were assessed using an accrued benefits method which takes into account pensionable membership up to the valuation date, and makes an allowance for expected future salary growth to retirement or expected earlier date of leaving pensionable membership.

Administering Authority Report

Assumptions

A market-related approach was taken to valuing the liabilities, for consistency with the valuation of the Fund assets at their bid market value.

The key financial assumptions adopted for the 2016 valuation were as follows:

Financial assumptions	31 March 2016 % (p.a)
Discount rate	4.0%
Salary increase assumption	2.2%
Benefit increase assumption (CPI)	2.1%

The key demographic assumption was the allowance made for longevity. The life expectancy assumptions are based on the Fund's VitaCurves with improvements in line with the CMI 2013 model, assuming the current rate of improvements has reached a peak and will converge to long term rate of 1.25% p.a. Based on these assumptions, the average future life expectancies at age 65 are as follows:

	Males	Females
Current Pensioners	22.5 years	24.9 years
Future Pensioners*	24.1 years	26.7 years

*Aged 45 at the 2016 Valuation.

Copies of the 2016 valuation report and Funding Strategy Statement are available on request from the Administering Authority to the Fund.

Experience over the period since 31 March 2016

Since the last formal valuation, real bond yields have fallen placing a higher value on the liabilities and there have been strong asset returns, particularly during 2016/17. Both events are of broadly similar magnitude with regards to the impact on the funding position.

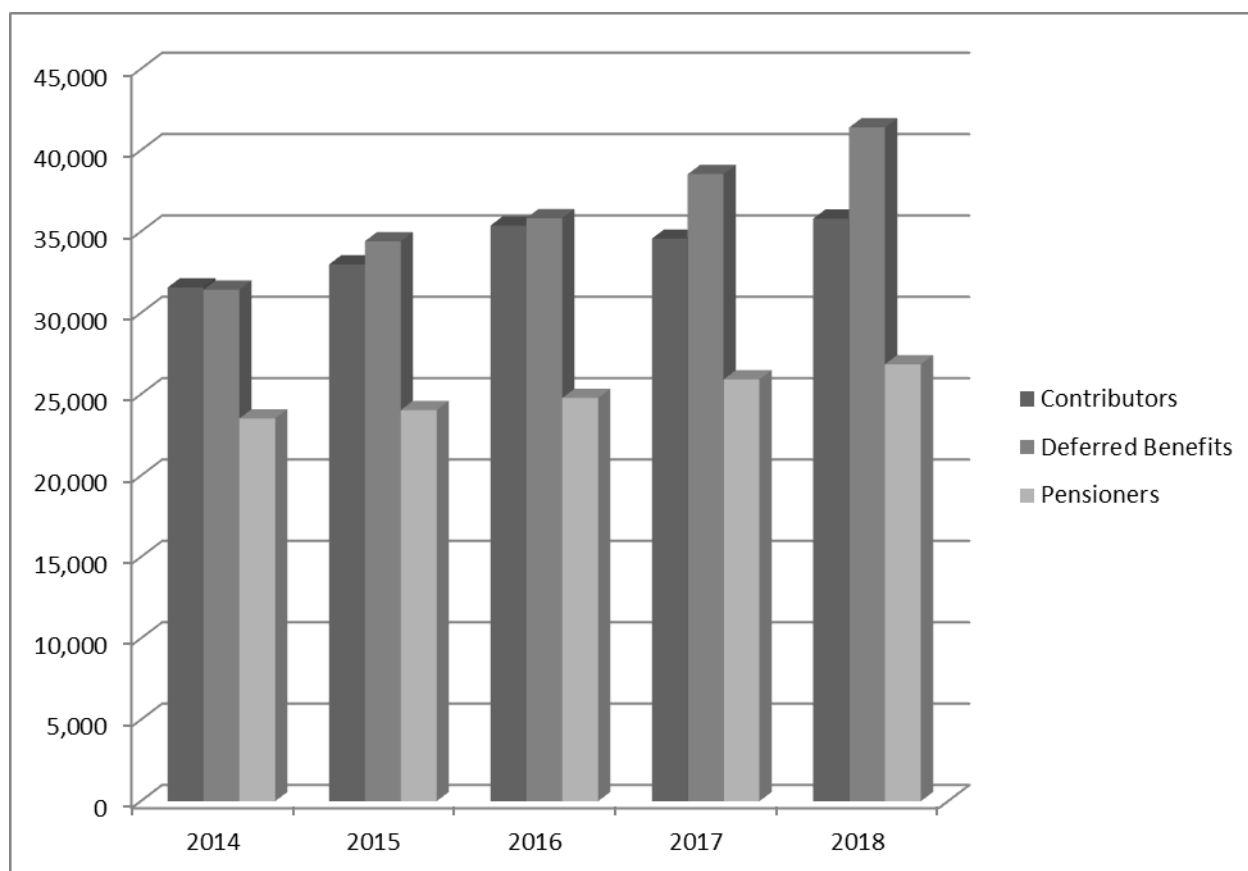
The next actuarial valuation will be carried out as at 31 March 2019. The Funding Strategy Statement will also be reviewed at that time.

Barry McKay FFA
Fellow of the Institute and Faculty of Actuaries
For and on behalf of Hymans Robertson LLP
2 May 2018

Hymans Robertson LLP
20 Waterloo Street
Glasgow

7. Membership

The following graph shows the changes in membership over the last five years and the following table analyses the membership between member groups along with comparative figures for 2017.



31 March 2017		31 March 2018
33,447	Contributors	35,812
26,019	Pensioners	26,856
39,744	Deferred benefits (former contributors)	41,409
99,210	Total Members	104,077

*The 2016/17 membership figures have been updated from those published in the 2016/17 Annual Report following late notifications of changes of membership. This is to ensure that the most accurate figures available are reported.

Changes in contributor members during the year	
Admissions	7,893
Retirements	(628)
Other leavers	(4,900)
Total net movement	2,365

The table below shows an analysis of the membership of the Pension Fund between the Administering Authority, admitted bodies and other employers at 31 March 2018.

Administering Authority Report

	Contributors	Pensioners	Deferred Benefits
Administering Authority	19,167	14,196	26,863
Admitted Bodies	1,598	2,121	1,808
Other scheduled bodies	15,047	10,539	12,738
Total	35,812	26,856	41,409

1. Statement of Responsibilities

Hertfordshire County Council's Responsibilities

Hertfordshire County Council is the Administering Authority of the Pension Fund. The Administering Authority is required to:

- make arrangements for the proper administration of the financial affairs of the Pension Fund and to secure that one of its officers has responsibility for the administration of those affairs. In this Administering Authority that officer is the Chief Finance Officer;
- manage the affairs of the Pension Fund to secure economic, efficient and effective use of the Pension Fund's resources and safeguard its assets; and
- approve the Statement of Accounts.

The Chief Finance Officer's Responsibilities

The Chief Finance Officer is responsible for the preparation of the Pension Fund's statement of accounts in accordance with proper practices as set out in the Chartered Institute of Public Finance and Accountancy (CIPFA) and Local Authority (Scotland) Accounts Advisory Committee (LASAAC) Code of Practice on Local Authority Accounting in the United Kingdom.

In preparing this statement of accounts, the Chief Finance Officer has:

- selected suitable accounting policies and then applied them consistently;
- made judgements and estimates that were reasonable and prudent;
- complied with the Code of Practice.

The Chief Finance Officer has also:

- kept proper accounting records which were up to date;
- taken reasonable steps for the prevention and detection of fraud and other irregularities.

2. Independent Auditor's Report to the Members of Hertfordshire County Council on the Pension Fund's financial statements

[to be added following audit of accounts]

3. Fund Account

2016/17		Note	2017/18	
£000s	£000s		£000s	£000s
34,359		6.1	35,382	
131,199		6.1	136,379	
	165,559			171,761
	14,492	6.2		17,635
	4 Other income			112
(117,876)			(122,729)	
(25,347)			(22,904)	
(2,863)			(2,468)	
	(146,087)	6.3		(148,102)
(629)			(626)	
(321)			(58)	
(9,041)		6.4	(13,190)	
	(9,990)			(13,874)
	23,978			27,532
(1,558)			(1,491)	
(1,037)			(1,166)	
(12,190)		6.5	(11,972)	
	(14,786)			(14,629)
	9,191			12,903
40,343		6.6	39,655	
(291)			(167)	
609,877		6.7	203,256	
	649,930			242,744
	659,121			255,646
	3,584,250			4,243,371
	4,243,371			4,499,017

4. Net Assets Statement

31 March 2017		Note	31 March 2018	
£000s	£000s		£000s	£000s
1,148,718			815,111	
	Equities			
	Pooled investment vehicles:			
286,375	Pooled property investments		295,919	
1,365,648	Unitised insurance policies		1,844,181	
598,057	Unit trusts		606,178	
131,052	Private equity		116,026	
605,223	Other managed funds		685,216	
1,709	Derivative contracts		16	
67,496	Cash deposits		101,564	
4,006	Other investment balances		13,501	
	4,208,283 Investment assets	6.8a	4,477,710	
(6)	Derivative contracts		(676)	
(125)	Other investment balances		(5,854)	
	(132) Investment liabilities		(6,530)	
	4,208,151 Net investment assets	6.8a	4,471,181	
2,217	Long term financial assets	6.10	1,478	
2,217 Total non-current assets and liabilities			1,478	
38,750	Current assets	6.11	29,780	
(5,747)	Current liabilities	6.12	(3,422)	
33,002 Total current assets and liabilities			26,358	
4,243,371	Net assets of the Fund available to fund benefits as the end of the reporting period.		4,499,017	

O Mapley
Director of Resources

5. Statement of Accounting Policies

Basis of Preparation

The accounts have been prepared in accordance with the provisions of the Code of Practice on Local Authority Accounting in the United Kingdom 2017/18 which is based upon International Financial Reporting Standards, as amended for the UK public sector.

The accounts summarise the transactions for the 2017/18 financial year and net assets of the Pension Fund as at 31 March 2018. The accounts do not take account of obligations to pay pensions and benefits which fall due after the end of the financial year. The actuarial present value of promised retirement benefits at the Net Assets Statement date is detailed in section 6.16.

Valuation of Assets

Financial assets are included in the net asset statement on a fair value basis as at the reporting date. A financial asset or liability is recognised in the net asset statement on the date the Pension Fund becomes party to the contractual acquisition of the asset or to the liability. From this date, any gains or losses arising from changes in the fair value of the asset or liability are recognised in the Fund Account. The values of investments as shown in the net asset statement have been determined at fair value in accordance with the regulation of the code and IFRS13. The values of investments as shown in the net assets statement have been determined as follows:

- Market-quoted securities, for which there is a readily available market price, are valued at bid price at the close of business on the net asset date.
- Fixed interest securities are recorded at net market value based on their current yields.
- Pooled investment vehicles are valued at the closing bid price if both bid and offer prices are quoted by the respective Investment Managers. If only a single price is quoted, investments are valued at the closing single price. In the case of pooled investment vehicles that are accumulation funds, the change in market value also includes income which is reinvested in the fund, net of applicable withholding tax.
- Unquoted investments for which market quotations are not readily available are valued having regard to the latest dealings, professional valuations, asset values and other appropriate financial information.
- Indirect private equity investments are interests in limited partnerships and are stated at the partnership's estimate of fair value. Investments are valued based on the Pension Fund's share of the net assets of the private equity fund. For private equity limited partnerships there is usually a time delay in receiving information from the private equity Investment Managers. The valuations shown in the Net Assets Statement for these investments are the latest valuations provided to the Pension Fund, adjusted for cash movements between the valuation date and the net asset date.
- Forward foreign exchange contracts are stated at fair value which is determined as the gain or loss that would arise from closing out the contract at the balance sheet date by entering into an equal and opposite contract.
- Investment assets and liabilities include cash balances held by the Investment Managers and debtor and creditor balances in respect of investment activities as these form part of the net assets available for investment.
- Rights issues are processed on ex date. If the value of the rights on ex date is 15% or more of the value of the underlying security, cost is allocated from the parent to the rights. If the value is less than 15%, the rights are allocated at zero cost.

Cash and Cash Equivalents

Cash is cash in hand and deposits with any financial institution, repayable without penalty and on notice of not more than 24 hours. Cash equivalents comprise investments that are held to meet short-term liabilities rather than for investment or other purposes. These are short term, highly liquid investments that are readily convertible to known amounts of cash and that are subject to minimal risk of changes in value. Bank overdrafts, repayable on demand and which form an integral part of the County Council's treasury management function, are also included as a component of cash and cash equivalents.

Foreign Currency Translation

All investments are shown in sterling. Dividends, interest, purchases and sales of investments in foreign currencies have been accounted for at the spot market rate at the date of transaction. End of year spot market exchange rates are used to value foreign currency cash balances, market values of overseas investments and purchases and sales outstanding at the net asset date.

Gains and losses on exchange arising from foreign currency investment and cash balances are included within the Fund Account for the year.

Management Expenses

The Local Government Pension Scheme (Management and Investment of Funds) Regulations 2017, allows the Administering Authority to charge directly to the Pension Fund any costs or expenses incurred in administering it. Management expenses are accounted for on an accruals basis and disclosed in accordance with the 2017 CIPFA guidance 'Accounting for Local Government Pension Scheme Management expenses' and analysed between administrative costs, oversight and governance costs and investment management expenses.

Fees of the external Investment Managers are agreed in the respective mandates governing their appointment. Fees are based on the market value of the portfolio under management. Where an Investment Manager's fee note has not been received for the final period, an estimate based on the market value of their mandate as at the end of the year is used for inclusion in the Fund Account. In 2017/18, £59,579 was based on such estimates.

Investment management expenses include transaction costs relating to the purchase and sale of investments.

VAT

The Pension Fund is exempt from VAT and is therefore able to recover such deductions. Investment management and administrative expenses are therefore recognised net of any recoverable VAT.

Benefits Payable

Pension and lump sum benefits payable include all amounts known to be due as 31 March 2018. Any amounts due but unpaid are disclosed in the Net Assets Statement as current liabilities.

Contributions

Normal contributions, both from members and employers, are accounted for on an accruals basis, at the percentage rate certified by the Pension Fund Actuary in the payroll period to which they relate. Employer deficit funding contributions are accounted for on an accruals basis in accordance with the period to which they relate or are due, or on a cash basis if the payment is an additional contribution in excess of the minimum required by the Pension Fund Actuary and set out in the Rates and Adjustments Certificate.

Pension strain contributions and employers' augmentation contributions are accounted for in the period in which the liability arises. Any amount due in year but unpaid is classed as a current financial asset.

Transfers to and from other schemes

Transfer values represent the amounts received and paid during the year for members who have joined or left the Pension Fund during the financial year and are calculated in accordance with Scheme regulations. Transfer values are treated on a cash basis when they are paid or received, which is normally when the member liability is accepted or discharged. Transfers in from members wishing to use the proceeds of their additional voluntary contributions to purchase Scheme benefits are accounted for on a receipts basis and are included in transfers in. Bulk transfers are accounted for on an accruals basis in accordance with the terms of the transfer agreement.

Investment Income

Investment income earned by the Pension Fund on its investments is recognised as follows:

- Interest income is recognised in the Fund Account as it accrues, using the effective interest rate of the financial instrument as at the date of acquisition or origination. Income includes the amortisation of any discount or premium, transaction costs or other differences between the initial carrying amount of the instrument and its amount at maturity calculated on an effective interest rate basis.
- Dividend income is recognised on the date the shares are quoted ex-dividend. Any amount not received by the end of the reporting period is disclosed in the Net Assets Statement under other investment balances.
- Investment income earned on pooled investment vehicles that are accumulation funds, where income is retained and automatically reinvested, are shown as changes in the value of investments in the Fund Account.
- Income from private equity investments are reported on the quarterly valuations provided by the private equity Investment Managers. Income is recognised in the period in which the valuation is received.
- Distributions from other pooled investment vehicles are recognised at the date of issue. Any amount not received by the end of the reporting period is disclosed in the Net Asset Statement under other investment balances.
- Changes in the value of investment income are accounted for as income and comprise all realised and unrealised profits and losses during the year.

Taxation

The Pension Fund is a registered public service scheme under section 1(1) of Schedule 36 of the Finance Act 2004 and as such, is exempt from UK income tax on interest received and from capital gains tax on the proceeds of investments sold. Tax is deducted from dividends paid on UK equities, which is not recoverable. Income from overseas investments suffers a withholding tax in the country of origin, unless exemption is permitted. Provision is made for the estimated sums to be recovered and income grossed up accordingly. Irrecoverable tax is accounted for as a Pension Fund expense as it arises.

Security Lending

The Local Government Pension Scheme (Management and Investment of Funds) Regulations 2009 (as amended) permit the Pension Fund to lend up to 35% of its securities from its portfolio of stocks to third parties in return for collateral. The Pension Fund has set a limit of 20% of the total Fund value. The securities on loan are included in the Net Assets Statement to reflect the Pension Fund's continuing economic interest of a proprietary nature in these securities.

Additional Voluntary Contribution Investments

The County Council has arrangements with the Standard Life Assurance Company and the Equitable Life Assurance Society to enable employees to make Additional Voluntary Contributions (AVCs) to enhance their pension benefits. AVCs are invested separately from the Pension Fund's main assets and the assets purchased are specifically allocated to provide additional benefits for members making AVCs. As these contributions do not form part of the Pension Fund's investments, the value of AVC investments are excluded from the Pension Fund's Net Assets Statement in accordance with regulation 4(2)(c) of the Local Government Pension Scheme (Management and Investment of Funds) Regulations 2009 (as amended).

Actuarial present value of promised retirement benefits:

The actuarial present value of promised retirement benefit is assessed on an annual basis by the Scheme actuary in accordance with the requirements of IAS 19 and relevant actuarial Standards. As permitted under the Code, the Fund has opted to disclose the actuarial present value of promised retirement benefits by way of a note to the accounts.

Prior period adjustments

There were no material prior period adjustments in 2017/18 that require disclosure.

Events after the Net Asset Date

There were no material post balance sheet events after 31 March 2018 that require disclosure.

Critical judgements in applying accounting policies

In applying the accounting policies set out above, the Pension Fund has had to make certain judgements about complex transactions or those involving uncertainty about future events. The critical judgements made in the accounts are:

- **Valuation of private equity investments:** Unquoted private equities are valued by the Investment Managers using the International Private Equity and Venture Capital Valuation Guidelines. These are inherently based on forward looking estimates and judgements involving many factors.
- **Pension fund liability:** The Pension Fund liability is calculated every three years by the Pension Fund Actuary, with annual updates in the intervening years. The methodology used is in line with accepted guidelines and in accordance with IAS19. Assumptions underpinning the valuations are agreed with the Actuary and are summarised in note 6.16. This estimate is subject to significant variances based on changes to the underlying assumptions.

Assumptions made about the future and other major sources of estimation uncertainty

Preparation of financial statements requires management to make judgements, estimates and assumptions that affect the amounts reported for assets and liabilities as at the net asset date and the amounts reported for revenues and expenses during the year. Estimates and assumptions are made taking into account historical experience, current trends and other relevant factors. However, the nature of estimation means that actual outcomes could differ from those assumptions and estimates. The key judgements and estimation uncertainty that have a significant risk of causing material adjustment to the carrying amounts of assets and liabilities within the next financial year are:

- **Valuation of private equity investments:** The valuations for private equity investments shown in the Net Assets Statement are based on the latest valuations provided to the Pension Fund, adjusted for cash movements between the valuation date and the net asset date. This may result in a variance between the valuation included in the Financial Statements and the actual value of the Pension Fund's investments as at 31 March 2018 issued by each of the private equity Investment Managers. At 31 March 2018 private equity investments totalled £181.3 million (including private equity investments held within the Global Alternatives Fund).

- **Contractual commitments:** Commitments to the private equity funds are made in local currency (sterling, euros and US dollars). The total remaining commitment to each private equity fund at 31 March 2018 has been converted to base currency, based on exchange rates applicable at the net asset date. The exact timing and amounts of when the Pension Fund's commitment will be drawn down is uncertain and therefore the actual payments made by the Pension Fund may be different from the estimates.
- **Actuarial present value of promised retirement benefits:** Estimation of the liability to pay retirement benefits depends on a number of complex judgements relating to the discount rate used to value the liabilities, the rate at which salaries increase, and changes in retirement ages and mortality rates. The consulting actuary to the Pension Fund, Hymans Robertson, is engaged to provide the Pension Fund with expert advice about the assumptions to be applied. Further information about the key assumptions used to calculate the actuarial present value of promised retirement benefits and the effect on the pensions liability of changes in individual assumptions are shown in section 6.16.
- **Provision for doubtful debt:** In 2017/18 a provision for doubtful debt was made of £95,291. The provision was created for all invoiced debt at 31 March 2018 of £460,143. The provision is based on the County Council's Income Collection and Debt Management Policy for providing for doubtful debt as follows:

Age of debt at 31 March 2018	Provision created
0 – 274 days	0%
275 – 456 days	35%
457 – 639 days	50%
Over 639 days	100%

NOTE: values throughout these accounts are presented rounded to whole numbers. Totals in supporting tables and notes may not appear to cast, cross-cast, or exactly match to the core statements or other tables due to rounding differences.

6.3 Benefits

2016/17		2017/18
£000s		£000s
64,208	Administering Authority	65,256
67,605	Other Scheduled Bodies	68,694
14,274	Admitted Bodies	14,152
146,087	Total benefits payable	148,102

6.4 Transfers to other Schemes or Funds

2016/17		2017/18
£000s		£000s
8,556	Individual transfers	13,190
484	Bulk transfers	-
9,041	Total transfers out to other schemes	13,190

6.5 Management Expenses

The Pension Fund's Investment Managers are remunerated on the basis of fees calculated as a percentage of assets under management or as a fixed annual fee. Some Investment Managers also have a performance related fee, payable where performance exceeds the performance target.

Investment management expenses include transaction costs associated with the acquisition, issue or disposal of Pension Fund assets and associated financial instruments. In addition to these costs, indirect costs are incurred through the bid-offer spread on investments sales and purchases. These are reflected in the cost of investment acquisitions and in the proceeds from the sales of investments set out in note 6.7.

The Pension Fund's assets are held in custody by an independent custodian. The custodian is responsible for the safekeeping of the Pension Fund's financial assets, the settlement of transactions, income collection, tax reclamation and other administrative actions in relation to the Pension Fund's investments.

The Pension Fund's performance measurement service is provided by BNY Mellon. An analysis of the Pension Fund's performance is shown in the Investment Performance section on pages 62 – 65.

2016/17		2017/18
£000s		£000s
11,015	Management fees (including performance fees)	11,430
963	Transaction costs	397
213	Custody fees	145
12,190	Total investment management expenses	11,972

An analysis of transaction costs by asset class is shown in the following table;

2016/17		2017/18
£000s		£000s
912	Equities	395
47	Property	2
4	Alternatives	1
963	Total Transaction costs	397

6.6 Investment Income**a) Analysis of investment income**

2016/17		2017/18
£000s		£000s
-	Income from fixed interest securities	(2)
31,602	Dividends from equities	29,403
-	Income from bonds	-
	Income from pooled investment vehicles:	
6,845	Pooled property investments	7,457
1,318	Other pooled investments	1,513
157	Interest on cash deposits	861
421	Other investment income	423
40,343	Total investment income	39,655

An analysis of investment income accrued during 2016/17 and 2017/18 is shown in the following table.

2016/17					2017/18			
UK	Overseas	Global	Total		UK	Overseas	Global	Total
£000s	£000s	£000s	£000s		£000s	£000s	£000s	£000s
21,596	10,006	-	31,602	Equities	22,710	6,694	-	29,403
-	-	-	-	Bonds	-	(2)	-	(2)
6,230	1,318	615	8,163	Alternatives	7,358	1,513	99	8,970
182	(25)	-	157	Cash and cash equivalents	209	652	-	861
273	147	-	421	Other	226	196	-	423
28,282	11,446	615	40,343	Total investment income	30,503	9,053	99	39,655

b) Securities lending

The Pension Fund has an arrangement with its Custodian to lend securities from within its portfolio of stocks to third parties in return for collateral. Collateralised lending generated income of £252,855 for 2017/18 (£231,134 for 2016/17). This is included within investment income in the Fund Account.

The Pension Fund obtains collateral at 102% of the market value of securities loaned for collateral denominated in the same currency as that of the loans, or 105% in the case of cross-currency collateral. The market value of securities on loan and collateral held at 31 March 2018 and 2017 is shown in the following table, analysed by collateral type.

2016/17			2017/18	
Market value of securities on loan	Collateral held		Market value of securities on loan	Collateral held
£000s	£000s		£000s	£000s
20,721	21,390	Government debt and Supranationals	22,407	23,590
62,888	66,756	G10 debt	-25,926	27,339
83,610	88,146	Total	48,333	50,929

6.7 Profit and Losses on the Disposal of Investments and Changes in the Value of Investments

An analysis of investment transactions in 2017/18 is shown in the following table.

Value at 31 March 2017		Purchases at cost and derivative payments	Sale proceeds and derivative receipts	Profits and losses on disposals and change in value of investments	Value at 31 March 2018
£000s		£000s	£000s	£000s	£000s
<u>Equities</u>					
729,797	UK	434,170	(754,799)	18,277	427,445
418,921	Overseas	60,786	(131,474)	39,433	387,666
<u>Pooled investment vehicles</u>					
286,375	Pooled property investments	17,110	(16,348)	8,783	295,919
1,365,648	Unitised insurance policies	2,177,391	(1,751,123)	52,265	1,844,181
598,057	Unit trusts	182,742	(190,898)	16,277	606,178
131,052	Private Equity	27,942	(51,527)	8,560	116,026
605,223	Other managed funds	30,001	(2,756)	52,749	685,216
1,702	Derivative contracts (net)*	4,505	(15,122)	8,255	(660)
67,496	Cash deposits	0	35,423	(1,356)	101,564
4,204,271	Subtotal	2,934,647	(2,878,625)	203,241	4,463,534
3,881	Net other investment balances**	-	3,716	-	7,647
4,208,151	Total investments assets / (liabilities)	2,934,647	(2,874,909)	203,241	4,471,181

* Net forward foreign exchange assets/liabilities (see note 6.8a)

** Net other investment balances assets/liabilities (see note 6.8a)

An analysis of investment transactions in 2016/17 is shown in the following table.

Value at 31 March 2016		Purchases at cost and derivative payments	Sale proceeds and derivative receipts	Profits and losses on disposals and change in value of investments	Value at 31 March 2017
£000s		£000s	£000s	£000s	£000s
<u>Equities</u>					
635,030	UK	111,394	(103,827)	87,199	729,797
456,887	Overseas	199,752	(376,461)	138,744	418,921
<u>Pooled investment vehicles</u>					
269,692	Pooled property investments	199,052	(200,956)	18,586	286,375
1,094,728	Unitised insurance policies	69	-	270,850	1,365,648
544,296	Unit trusts	13,215	(2,953)	43,499	598,057
115,942	Private Equity	23,276	(33,072)	24,905	131,052
383,660	Other managed funds	183,175	(1,990)	40,378	605,223
124	Derivative contracts (net)	28,309	(11,938)	(14,792)	1,702
56,642	Cash deposits	10,347	-	508	67,496
3,557,001	Subtotal	768,588	(731,197)	609,877	4,204,271
9,929	Net other investment balances**				3,881
3,566,930	Total investments assets / (liabilities)				4,208,152

* Net forward foreign exchange assets/liabilities (see note 6.8a)

** Net other investment balances assets/liabilities (see note 6.8a)

The change in market value of investments during the year comprises all increases and decreases in the market value of investments held at year end and profits and losses realised on the sale of investments during the year. Derivative receipts and payments correspond to the sterling equivalent amount of forward foreign exchange settled during the year. The sale proceeds for cash deposits represent the net movement in cash held by the Investment Managers during the year. The change in market value of cash results from gains and losses on foreign currency cash transactions.

6.8 Investment Analysis

a) Analysis of investment assets at market value

2016/17		2017/18	
£000s	£000s	£000s	£000s
	Investment assets		
729,797	UK quoted	427,445	
418,921	Overseas quoted	387,666	
	1,148,718 Total equities		815,111
135,690	UK property	149,040	
764	Overseas property	44	
149,921	Global property	146,835	
	286,375 Pooled property investments		295,919
136,949	UK equity funds	139,027	
743,353	Overseas equity funds	778,607	
485,345	UK Index Linked Gilts Fund	926,546	
	1,365,648 Total Unitised insurance policies		1,844,181
7,851	UK Equity unit trusts	-	
409,726	Global Core Plus Bond Fund	606,178	
180,480	Global Absolute Return Bond Fund	-	
	598,057 Total unit trusts		606,178
131,052	Overseas private equity	116,026	
	131,052 Total private equity		116,026
16,485	UK equity	17,233	
192,944	Overseas equity	242,207	
395,794	Global Alternatives Fund	425,776	
	605,223 Total other managed funds		685,216
1,709	Forward foreign exchange	16	
	1,709 Total derivative contracts		16
67,496	Cash deposits	101,564	
	67,496 Total Cash		101,564
0	Amounts receivable from the sale of investments	-	
4,006	Investment income due	13,501	
	4,006 Total other investment balances		13,501
	4,208,283 Total investment assets		4,477,710
	Investment liabilities		
(6)	Forward foreign exchange contracts	(676)	
	(6) Total derivatives contracts		(676)
(111)	Amounts payable for the purchase of investments	(5,854)	
(14)	Non recoverable tax payable	-	
	(125) Total other investment balances		(5,854)
	(131) Total investment liabilities		(6,530)
	4,208,151 Net investment assets		4,471,181

Financial Statements

Six pooled holdings exceeded 5% of the total investment assets and liabilities available to fund benefits and 5% of their asset class at 31 March 2018. These were the Baillie Gifford Long Term Global Growth Fund, the UBS Over 5yr Index Linked Gilts Fund, the Legal & General Over 5yr Index Linked Gilts Fund, the Royal London Core Plus Bond Fund, the UBS North America Equity Index Fund, and the Crown HCC Segregated Portfolio (LGT Capital Alternatives).

Cash deposits (including cash and cash instruments) and other investment balances (including accrued dividend entitlements) are accounted for as investment assets as these form part of the net assets available for investment within the investment portfolio.

Investment assets and liabilities at the Net Asset date are further analysed by asset class in the following table.

2016/17					2017/18			
UK £000s	Overseas £000s	Global £000s	Total £000s		UK £000s	Overseas £000s	Global £000s	Total £000s
891,100	1,355,199	-	2,246,299	Equities	583,705	1,408,480	-	1,992,185
895,072	-	180,480	1,075,552	Bonds	1,532,724	-	-	1,532,724
135,690	131,816	545,715	813,221	Alternatives	149,040	116,070	572,612	837,722
60,137	7,359	-	67,496	Cash and cash equivalents	89,311	12,260	(7)	101,564
2,431	1,449	1,702	5,583	Other	730	6,917	(660)	6,987
1,984,430	1,495,823	727,898	4,208,151	Net investment assets	2,355,509	1,543,727	571,944	4,471,181

b) Analysis by Investment Manager

The value of investments held by each Investment Manager on 31 March 2018 are shown in the following table with a comparison to 2017.

31 March 2017			31 March 2018		
£000s	%		£000s	%	
471,377	11.2	Allianz Global Investors Europe GmbH	440,145	9.8	
591,968	14.1	Baillie Gifford & Co.	666,792	14.9	
304,631	7.3	CBRE Global Collective Investors (UK) Ltd.	330,382	7.4	
99,001	2.4	HarbourVest Partners, LLC	89,447	0.0	
180,480	4.3	Henderson Global Investors Ltd.	-	0.0	
369	0.0	JP Morgan Asset Management (UK) Ltd.	-	0.0	
341,777	8.1	Jupiter Asset Management Ltd.	375	0.0	
1,365,648	32.5	Legal & General Assurance (Pensions Management) Limited	369,123	8.3	
395,794	9.4	LGT Capital Partners (Ireland) Ltd	425,776	9.5	
7,144	0.2	Pantheon Ventures	17,537	0.4	
687	0.0	Permira Advisers LLP	690	0.0	
409,910	9.7	Royal London Asset Management Ltd.	606,361	13.6	
38,882	0.9	Standard Life Investments Ltd.	44,284	1.0	
-	-	UBS Group AG	1,479,949	33.1	
483	0.0	Residual funds from previous portfolios	-	0.0	
4,208,151	100	Funds externally managed	4,471,181	100	
35,219		Funds held at Hertfordshire County Council and non-investment balances	27,836		
4,243,371		Net Assets of the Fund	4,499,017		

The market values in table 6.8(b) include the value of investments, cash and net current assets held by each Investment Manager at 31 March. The funds held by Hertfordshire County Council include net current assets, long term assets and cash required to manage the cash flow associated with the payment of benefits and collection of contributions.

Financial Statements

Residual funds from previous portfolios represent residual cash and investment income still due to the portfolios previously run by outgoing Investment Managers following the review of the Pension Fund's Investment Strategy.

c) Encumbrance of Assets

The Custodian has a lien over the Pension Fund's assets in order to recover any outstanding debts. This is held for the protection of the Custodian and has never been invoked.

6.9 Derivatives

The Pension Fund uses derivative financial instruments to manage its exposure to specific risks arising from its investment activities. The Pension Fund does not hold derivatives for speculative purposes.

Forward foreign exchange contracts

Forward foreign exchange contracts are over the counter contracts with non-exchange counterparties and are used to hedge against foreign currency movements. Forward foreign exchange contracts are disclosed in the accounts at fair value, which is the gain or loss that would arise from closing out the contract at the balance sheet date by entering into an equal and opposite contract at that date.

The counterparties at 31 March 2017 and 31 March 2018 were UK and overseas investment banks and the contracts held with these investment banks are analysed in the following table by duration.

2016/17				Duration	2017/18			
Currency Payable	Currency Receivable	Fair Value			Currency Payable	Currency Receivable	Fair Value	
£000s	£000s	Asset	Liability		£'000	£000s	Asset	Liability
		£000s	£000s				£000s	£000s
				Within 1 month	(1,299)	1,297	-	(2)
-	-	-	-	0-3 months	-	-	-	-
(137,087)	138,790	1,709	(6)	3-6 months	(135,320)	134,662	16	(673)
(137,087)	138,790	1,709	(6)	Total	(136,619)	135,959	16	(676)

6.10 Long Term Financial Assets

Long term assets of £1,478,000 in the Net Assets Statement (£2,217,000 for 2016/17) relates to the bulk transfer of Magistrates Court staff to the civil service pension scheme in 2005 in accordance with the terms of transfer agreement.

6.11 Current Assets

2016/17		2017/18
£000s		£000s
13,514	Contributions due from employers	13,831
8,516	Cash and cash equivalents	15,087
440	VAT due from HMRC	379
16,391	Other debtors and prepayments	577
(112)	Provision for doubtful debt	(95)
38,750	Total current assets	29,780

Cash and cash equivalents represent investments in money market funds and call accounts where funds are repayable without penalty and on notice of not more than 24 hours.

Financial Statements

Current assets are further analysed by type of debtor organisation.

2016/17		2017/18	
£000s	£000s	£000s	£000s
2,930	Central government bodies	3,321	
8,304	Other local authorities	9,358	
5	NHS bodies	5	
19,107	Other entities and individuals	2,103	
	30,345		14,788
(112)	Provision for doubtful debt	(95)	
8,516	Cash and cash equivalents	15,087	
	8,404		14,992
	38,750		29,780
	Total debtors		
	Total cash balances		
	Total current assets		

6.12 Current Liabilities

2016/17		2017/18	
£000s		£000s	
2,385	Tax payable to HMRC	1,301	
1,085	Investment management fees	868	
449	Other creditors	396	
1,552	Unpaid benefits	354	
278	Cash and cash equivalents	502	
5,747	Total current liabilities	3,422	

Cash balances in the table above include cash balances less cash in transit in the form of unrepresented cheques and payments committed by BACs at the net asset date.

Current liabilities are further analysed by type of creditor organisation.

2016/17		2017/18	
£000s		£000s	
2,385	Central government bodies	1,301	
-	Other local authorities	-	
3,085	Other entities and individuals	1,619	
278	Cash and cash equivalents	502	
5,747	Total current liabilities	3,422	

6.13 Fair Value – Basis of Valuation

The basis of the valuation of each class of investment asset is set out below. There has been no change in the valuation techniques used during the year. All assets have been valued using fair value techniques which represent the highest and best price available at the reporting date.

Description of asset	Valuation Hierarchy	Basis of valuation	Observable and unobservable inputs	Key sensitivities affecting the valuations provided
Equities quoted	Level 1	Published bid market price ruling on the final day of accounting period	N/A	N/A
Other managed funds – equities	Level 2	Closing single price	NAV based pricing set on a forward pricing basis	N/A
Pooled property investments	Level 2	Closing bid price where bid and offer prices are published. Closing single price where single price is published.	NAV based pricing set on a forward pricing basis	N/A
Unitised insurance contracts – equities	Level 2	Price of a recent transaction for an identical asset	Inputs other than quoted prices that are observable, either directly or indirectly	N/A
Unitised insurance contracts – bonds	Level 2	Price of a recent transaction for an identical asset	Inputs other than quoted prices that are observable, either directly or indirectly	N/A
Unit trusts – equities	Level 2	Average of broker prices	Evaluated price feeds	N/A
Unit trusts – bonds	Level 2	Closing bid, mid and offer prices are published	NAV based pricing set on a forward pricing basis	N/A
Global Alternatives fund	Level 3	Closing single price	NAV based pricing set on a forward pricing basis	Valuations could be affected by material events occurring between the date of the financial statements provided and the pension fund's own reporting date, by changes to expected cashflows, and by any differences between audited and unaudited accounts
Private equity	Level 3	At fair value as determined by the General Partner in accordance with the terms of the Partnership Agreement and GAAP	Manager's cash flow projections, estimates of growth expectations and profitability, profit margin expectations, adjustments to current prices for similar properties, valuation techniques	Valuations could be affected by material events occurring between the date of the financial statements provided and the pension fund's own reporting date by changes to expected cash flows, earning multiples and discount rates used in the discounted cash flow analysis

6.14 Financial Instruments

a) Classification of financial instruments

Accounting policies describe how different asset classes of financial instruments are measured and how income and expenses, including fair value gains and losses, are recognised. The following table analyses the carrying amounts of financial assets and liabilities by category and Net Assets Statement heading.

All financial instruments are carried in the balance sheet at their fair value. The Pension Fund has not entered into any financial guarantees that are required to be accounted for as financial instruments.

31 March 2017			31 March 2018		
Fair value through profit and loss £000s	Loans and receivables £000s	Financial liabilities at amortised cost £000s	Fair value through profit and loss £000s	Loans and receivables £000s	Financial liabilities at amortised cost £000s
1,148,718	-	-	815,111	-	-
286,375	-	-	295,919	-	-
1,365,648	-	-	1,844,181	-	-
598,057	-	-	606,178	-	-
131,052	-	-	116,026	-	-
605,223	-	-	685,216	-	-
1,709	-	-	16	-	-
-	67,496	-	-	101,564	-
4,006	-	-	13,501	-	-
-	2,217	-	-	1,478	-
-	38,750	-	-	29,780	-
4,140,787	108,463	-	4,376,147	132,821	-
(6)	-	-	(676)	-	-
(125)	-	-	(5,854)	-	-
-	-	(5,747)	-	-	(3,422)
(132)	-	(5,747)	(6,530)	-	(3,422)
4,140,655	108,463	(5,747)	4,369,617	132,821	(3,422)

b) Net gains and losses on financial instruments

2016/17 £000s		2017/18 £000s
609,370	Fair value through profit and loss	204,612
508	Loans and receivables	(1,356)
609,877	Total gains and losses	203,256

c) Valuation of financial instruments carried at fair value

The valuation of financial instruments has been classified into three levels, according to the quality and reliability of information used to determine fair values.

Level 1: Financial instruments where the fair values are derived from unadjusted quoted prices in active markets for identical assets or liabilities. Products classified as level 1 comprise quoted equities, quoted fixed interest securities, quoted index linked securities and unit trusts. Listed securities are shown at bid prices. The bid value of the investment is based on the bid market quotation of the relevant stock exchange.

Level 2: Financial instruments where quoted market prices are not available; for example, where an instrument is traded in a market that is not considered to be active or where valuation techniques are used to determine fair value and where these techniques use inputs that are based significantly on observable market data.

Level 3: Financial instruments where at least one input that could have a significant effect on the instrument's valuation is not based on observable market data.

The following tables provide an analysis of the financial assets and liabilities of the Pension Fund analysed across levels 1 to 3, based on the level at which the fair value is observable, along with comparative figures for 2017.

31 March 2018				
	Level 1	Level 2	Level 3	Total
	£000s	£000s	£000s	£000s
<u>Financial assets</u>				
Fair value through profit and loss	828,611	3,005,733	541,802	4,376,147
Loans and receivables	132,821	-	-	132,821
<u>Financial liabilities</u>				
Fair value through profit and loss	(5,854)	(676)	-	(6,530)
Financial liabilities at amortised cost	(3,422)	-	-	(3,422)
Net financial assets	952,156	3,005,057	541,802	4,499,017

31 March 2017				
	Level 1	Level 2	Level 3	Total
	£000s	£000s	£000s	£000s
<u>Financial assets</u>				
Fair value through profit and loss	1,341,055	2,272,886	526,846	4,140,787
Loans and receivables	108,463	-	-	108,463
<u>Financial liabilities</u>				
Fair value through profit and loss	(125)	(6)	-	(132)
Financial liabilities at amortised cost	(5,747)	-	-	(5,747)
Net financial assets	1,443,645	2,272,880	526,846	4,243,371

d) Transfers between Levels 1 and 2

There were no transfers between levels 1 and 2.

e) Reconciliation of fair value measurements within level 3

Value at 31 March 2017		Transfers into Level 3	Transfers out of Level 3	Purchases at cost and derivative payments	Sale proceeds and derivative receipts	Unrealised gains/ (losses)	Realised gains/ (losses)	Value at 31 March 2018
£000s				£000s	£000s		£000s	£000s
131,052	Private Equity	-	-	27,942	(51,527)	(11,156)	19,716	116,026
395,794	Global Alternatives Fund - LGT	-	-	30,000	0	(18)	0	425,776
526,846		-	-	57,942	(51,527)	(11,174)	19,716	541,802

f) Sensitivity of assets valued at level 3

Having analysed historical data and current market trends, and consulted with independent investment advisors, the fund has determined that the valuation method described above (6.13) is likely to be accurate to within the following ranges, and has set out below the consequent potential impact on the closing value of investments held at 31 March 2018.

Asset Class	Value as at 31 March 2018 £000s	Assessed valuation range (+/-) %	Value on Increase £000s	Value on Decrease £000s
Private Equity	116,026	15%	133,430	98,622
Global Alternatives Fund (LGT)	425,776	15%	489,643	361,910
	541,802		623,073	460,532

6.15 Nature and Extent of Risks Arising from Financial Instruments

The Pension Fund maintains positions in a variety of financial instruments including bank deposits, equity instruments, fixed interest securities and derivatives. This exposes it to a variety of financial risks including credit and counterparty risk, liquidity risk, market risk and exchange rate risk.

a) Overall procedures for managing risk

The principal powers to invest are contained in the Local Government Pension Scheme (Management and Investment of Funds) Regulations 2016 and require an administering authority to invest any pension fund money that is not needed immediately to make payments from the pension fund. These regulations require the Pension Fund to formulate a policy for the investment of its Fund money.

The Administering Authority's overall risk management procedures focus on the unpredictability of financial markets and implementing restrictions to minimise these risks.

The Pension Fund has prepared an Investment Strategy Statement which is provided at page 51 and sets out the Pension Fund's policy on matters such as the type of investments to be held, balance between types of investments, investment restrictions and the way risk is managed.

Pension Fund cash held by the Administering Authority is invested in accordance with the Pension Fund's treasury management strategy and lending policy ("Treasury Management Strategy"), prepared in accordance with the CIPFA Prudential Code, CIPFA Treasury Management in the Public Services Code of Practice and the legal framework and investment guidance set out and issued through the Local Government Act 2003. The Treasury Management Strategy sets out the criteria for investing and selecting investment counterparties and details the approach to managing risk for the Pension Fund's financial instrument exposure.

Investment performance by external Investment Managers and the Administering Authority is reported to the Pensions Committee and Board quarterly. Performance of Pension Fund investments managed by external Investment Managers is compared to benchmark returns. For Pension Fund cash held by the Administering Authority, performance of the treasury function is assessed against treasury management performance measures modelled on the CIPFA Treasury Management Code of Practice which has been adopted by the County Council.

b) Credit risk and counterparty risk

Credit risk is the risk that a counterparty to a financial instrument will fail to discharge an obligation or commitment that it has entered into with the Pension Fund. The market value of investments generally reflects an assessment of credit in their pricing and consequently the risk of loss is implicitly provided for in the carrying value of the Pension Fund's financial assets and liabilities. Therefore credit risk on investments is reflected in the market risk, in the other price risk figures given in section d) Market Risk.

In addition, the Pension Fund reviews its exposure to credit and counterparty risk on its investments through its external Investment Managers by the review of the Investment Managers' annual internal control reports. This is to ensure that Investment Managers exercise reasonable care and due diligence in their activities for the Pension Fund, such as in the selection and use of brokers. The Investment Management Agreements for the Pension Fund's bond managers prescribes the investment restrictions on the securities they can invest in, including the minimum acceptance criteria for investments.

Credit risk also arises through the Pension Fund's deposits with banks and financial instruments. For cash managed by the Administering Authority, the Pension Fund's Treasury Management Strategy for 2017/18 sets out the type and minimum acceptable criteria for investments by reference to credit ratings from Fitch, Moody's and Standard & Poor's and outlines the process to be followed for credit rating downgrades.

The credit ratings and amounts held in money market funds, call accounts and cash/current accounts at 31 March 2017 and 2018 are shown in the table below.

2016/17			2017/18	
£000s	Credit rating		£000s	Credit rating
Cash managed by Administering Authority				
(248) ¹	A-	Bank current account	(501) ¹	A-
1,931	A-	Call accounts	1,497	A
6,556	AAA	Money market funds	13,589	AAA
Cash managed by Custodian and Investment Managers				
7,841	A to AA-	Bank current account	13,783	A to AA-
67,082	AAA	Money Market Funds	97,998	AAA
83,162		Total cash and cash equivalents	126,366	

¹ Cash balances include cash balances less cash in transit in the form of unpresented cheques and payments committed by BACS at the Net Asset date.

c) Liquidity risk

Liquidity risk is the risk that the Pension Fund will not be able to meet its financial obligations when they fall due.

The main risk for the Pension Fund is not having the funds available to meet its commitments to make pension payments to its members. To manage this, the Pension Fund has a cashflow management system that seeks to ensure that cash is available when needed. The Pension Fund also manages its liquidity risk by having access to money market funds and call accounts where funds are repayable without penalty and on notice of not more than 24 hours. At 31 March 2018 £14,585,053 (100%) of the cash and cash equivalents held by the Administering Authority was held in money market funds, call accounts and bank current accounts.

The Pension Fund has set a cap of £42 million on the amount of cash held by the Administering Authority to balance the need for the Pension Fund to be as fully invested as possible whilst maintaining liquidity to avoid the need to sell assets at inopportune times. Where there are surplus funds in excess of the cap, these funds are distributed to Investment Managers, after taking advice from the Pension Fund's Investment Consultant.

External Investment Managers have substantial discretionary powers over their individual portfolios and the management of their cash positions. The Pension Fund's investments are largely made up of listed securities on major stock exchanges and are therefore considered readily realisable. The Pension Fund defines liquid assets as assets which can be converted into sterling cash within three months. At 31 March 2018 the value of illiquid assets was £477,221,021 or 10.7% of total fund assets (£458,922,584 (10.9%) at 31 March 2017).

d) Market risk

Market risk is the risk of loss from fluctuations in equity and commodity prices, interest and foreign exchange rates and credit spreads. The Pension Fund is exposed to the risk of financial loss from a change in the value of its investments and the risk that the Pension Fund's assets fail to deliver returns in line with the anticipated returns underpinning the valuation of its liabilities over the long term. The change in the market value of its investments during the year was £203,241,431.

In order to manage market value risk, the Pension Fund has set restrictions on the type of investments it can hold, subject to investment limits, in accordance with the Local Government Pension Scheme (Management and Investment of Funds) Regulations 2016 (as amended). Details of these can be found in the Pension Fund's Investment Strategy Statement on pages 51 - 58.

The Pension Fund has adopted a specific benchmark and the weightings of the various asset classes within the benchmark form the basis for asset allocation within the Pension Fund. This allocation is designed to diversify the risk and minimise the impact of poor performance in a particular asset class. It seeks to achieve a spread of investments across both the main asset classes (quoted equities, bonds, private equity and property) and geographic regions within each class.

Market risk is also managed by constructing a diversified portfolio across multiple Investment Managers and regularly reviewing the Investment Strategy and performance of the Pension Fund. On a daily basis, Investment Managers will manage risk in line with policies and procedures put in place in the Investment Manager Agreement and ensure that the agreed limit on maximum exposure to any one issuer or class of asset is not breached.

For cash managed by the Administering Authority, the Pension Fund has set institution and group limits to diversify the Pension Fund's investment across a range of individual holdings, sectors and countries.

Other price risk

Other price risk represents the risk that the value of a financial instrument will fluctuate as a result of changes in market prices (other than those arising from interest rate risk or foreign exchange risk), whether these changes are caused by factors specific to the individual instrument or issuer or factors affecting all such instruments in the market.

The Pension Fund is exposed to changes in equity and bond prices, as the future price is uncertain. All securities investments present a risk of loss of capital. This risk is mitigated using diversification and policies on selecting investments as discussed above.

The one year expected volatility in market prices are shown in the following table, along with the changes in the value of the Pension Fund's investment assets and liabilities if the market price of investments increase or decrease in line with these movements. The total fund volatility takes into account the expected interactions between the different asset classes, based on the underlying volatilities and correlations of the assets in line with mean variance portfolio theory.

Asset Class	Value as at 31 March 2018 £000s	Change %	Value on Increase £000s	Value on Decrease £000s
UK Equities, Unit Trusts and Pooled Funds	583,705	16.80	681,767	485,642
Global equities, Unit Trusts and Pooled Funds (ex UK)	1,431,376	17.90	1,687,592	1,175,159
Property	295,919	14.30	338,236	253,603
Corporate Bonds (medium term)	606,178	10.20	668,008	544,348
Index-Linked gilts (medium term)	926,546	7.20	993,258	859,835
Private Equity	181,302	28.30	232,610	129,993
Commodities	-	-	-	-
High yield debt/convertible bonds/insurance linked securities	112,428	6.70	119,961	104,895
Private Debt	1,835	7.00	1,964	1,707
Emerging Market Debt	34,996	12.20	39,265	30,726
Infrastructure equity	10,724	20.10	12,879	8,568
Absolute Return Bonds	-	-	-	-
Absolute return/Diversified Growth	167,429	12.60	188,525	146,333
Cash, other investment balances and forward foreign exchange contracts	118,744	0.50	119,337	118,150
Total Fund	4,471,181		5,083,402	3,858,960

Asset Class	Value as at 31 March 2017 £000s	Change %	Value on Increase £000s	Value on Decrease £000s
UK Equities, Unit Trusts and Pooled Funds	901,747	15.8	1,044,223	759,271
Global equities, Unit Trusts and Pooled Funds (ex UK)	1,376,555	18.4	1,629,841	1,123,269
Property	281,922	14.2	321,955	241,889
Corporate Bonds (medium term)	409,726	10.1	451,109	368,344
Index-Linked gilts (medium term)	485,345	7.1	519,805	450,886
Private Equity	186,750	28.5	239,974	133,526
Commodities	0	15.8	0	0
High yield debt/convertible bonds/insurance linked securities	98,131	7.0	105,000	91,262
Emerging Market Debt	32,591	12.4	36,632	28,549
Infrastructure equity	9,973	20.4	12,007	7,938
Absolute Return Bonds	180,480	2.9	185,714	175,246
Absolute return/Diversified Growth	160,726	12.5	180,816	140,635
Cash, other investment balances and forward foreign exchange contracts	84,205	0.0	84,205	84,205
Total Fund	4,208,151		4,811,281	3,605,020

Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates.

The Pension Fund recognises that interest rates can vary and can affect both income to the Pension Fund and the value of the net assets available to pay benefits. A 100 basis point (BPS) movement in interest rates has been advised by the Pension Fund Actuary, as a sensible level to indicate interest rate sensitivity.

The analysis in the following table assumes that all other variables, in particular exchange rates, remain constant, and shows the effect in the year on the net assets available to pay benefits, of a +/- 100 BPS change in interest rates. Movement in bond values have been calculated to include the impact of modified duration. Modified duration expresses the measurable change in the value of a security in response to a change in interest rates.

Value at 31 March 2017 £000s	Potential change +/- 100 BPS £000s	Value on Increase £000s	Value on Decrease £000s	Asset class exposed to interest rate risk	Value at 31 March 2018 £000s	Potential change +/- 100 BPS £000s	Value on Increase £000s	Value on Decrease £000s
74,923	-	74,923	74,923	Cash at Custodian and Investment Managers	111,781	-	111,781	111,781
8,239	-	8,239	8,239	Cash held by Administering Authority	14,585	-	14,585	14,585
1,151,861	161,912	989,949	1,313,773	Bond (pooled funds)	1,618,033	287,458	1,330,575	1,905,490
1,235,022	161,912	1,073,111	1,396,935	Total	1,744,399	287,057	1,456,941	2,031,856

Value at 31 March 2017 £000s	Potential change +/- 100 BPS £000s	Value on Increase £000s	Value on Decrease £000s	Income source exposed to interest rate risk	Value at 31 March 2018 £000s	Potential change +/- 100 BPS £000s	Value on Increase £000s	Value on Decrease £000s
107	1	108	106	Cash at Custodian and Investment Managers	808	8	816	800
51	1	52	50	Cash held by Administering Authority	53	5	58	48
157	2	160	156	Total	861	13	874	848

This analysis demonstrates that a 1% increase in interest rates will not affect the interest received on fixed interest assets but will reduce their fair value and vice versa. Changes in interest rates do not impact on the value of cash but they will affect the interest income received on those balances. Changes to both the fair value of assets and the income received from investments impact on the net assets available to pay benefits.

The Pension Fund's bond holdings are held in accumulation funds where income is retained and automatically reinvested rather than being distributed to the Pension Fund. Income earned from these funds is therefore excluded from the analysis above.

Currency risk

Currency risk represents the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates.

The Pension Fund holds a number of financial assets and liabilities in overseas financial markets and is therefore exposed to the risk of loss arising from exchange rate movements of foreign currencies. At 31 March 2018, the Pension Fund had overseas investments (excluding forward foreign exchange contracts) of £2,231,488,786 and £12,259,817 of cash denominated in currencies other than sterling.

The Pension Fund Actuary has advised that the one year expected standard deviation for an individual currency at the 31 March 2018 is 10% (10% at 31 March 2017). This assumes no diversification, and in particular, that interest rates remain constant. An analysis of the impact this would have on the Pension Fund is given in the following table together with the prior year comparator.

Asset Class	Value as at 31 March 2018	Potential market movement +/-10%	Value on Increase	Value of Decrease
	£000s	£000s	£000s	£000s
Overseas Equity	387,666	38,767	426,433	348,900
Overseas property	142,738	14,274	157,012	128,464
Overseas unit trusts	917,058	91,706	1,008,764	825,353
Overseas managed funds	784,026	78,403	862,429	705,623
Foreign currencies	12,260	1,226	13,486	11,034
Total	2,243,749	224,375	2,468,123	2,019,374

Asset Class	Value as at 31 March 2017	Potential market movement +/-10%	Value on Increase	Value of Decrease
	£000s	£000s	£000s	£000s
Overseas Equity	418,921	41,892	460,813	377,029
Overseas property	141,689	14,169	155,858	127,520
Overseas unit trusts	922,210	92,221	1,014,431	829,989
Overseas managed funds	711,739	71,174	782,913	640,565
Foreign currencies	7,359	736	8,095	6,623
Total	2,201,918	220,192	2,422,110	1,981,726

External Investment Managers manage this risk through the use of forward foreign exchange contracts and futures, to hedge currency exposures back to the base currency. See section 6.9 for further information.

The Treasury Management Strategy does not permit the Administering Authority to invest in foreign currency denominated deposits.

6.16 Actuarial Present Value of Promised Retirement Benefits

The actuarial present value of promised retirement benefits of the Pension Fund at 31 March 2018 and 31 March 2017 are set out in the following table. This is the underlying commitment of the Pension Fund in the long term to pay retirement benefits to its active (employee members), deferred and pensioner members.

31 March 2017		31 March 2018
£m		£m
5,473	Present value of promised retirement benefits	5,576

Liabilities have been projected using a roll forward approximation from the latest formal valuation as at 31 March 2017 and therefore do not take account of any changes in membership since the valuation date. The liability at 31 March 2018 is estimated to comprise of £2,358 million with respect to employee members, £1,300 million with respect to deferred members and £1,918 million with respect to pensioners. The principal assumptions used by the Pension Fund Actuary were:

31 March 2017		31 March 2018
Financial assumptions		
2.4% per annum	Inflation/pension increase rate	2.4% per annum
2.5% per annum	Salary increase rate	2.5% per annum
2.6% per annum	Discount rate	2.7% per annum
Mortality assumptions		
Longevity at 65 for current pensioners:		
22.5	• Men	22.5
24.9	• Women	24.9
Longevity at 65 for future pensioners:		
24.1	• Men	24.1
26.7	• Women	26.7

Financial Statements

Allowance has been made for future pensioners to elect to exchange 50% of the maximum additional tax free cash up to HMRC limits for pre-April 2008 service and 75% of the maximum tax-free cash for post April 2008 service.

The actuarial present value of promised retirement benefits is sensitive to changes in actuarial assumptions. The significant changes and their impact on the value of the Pension Fund's liabilities between 31 March 2017 and 31 March 2018 were:

Sensitivity to the assumptions for the year ended 31 March 2018	£m	%
0.5% p.a. increase in the Pension Increase Rate	445	8
0.5% p.a. increase in the Salary Increase Rate	67	1
0.5% p.a. decrease in the Real Discount Rate	541	10
Total increase in liabilities due to changes in assumptions	1,053	19

The assumptions used by the Pension Fund Actuary to calculate the present value of promised retirement benefits are those required by the Code of Practice on Local Authority Accounting 2017/18. The liability set out in the table above is used for statutory accounting purposes and should not be compared against the value of liabilities calculated on a funding basis, which is used to determine contribution rates payable by employers in the Pension Fund. Further information on the Pension Fund's policy for funding its liabilities is set out in section 6.17.

6.17 Funding Policy

The Pension Fund's approach to funding its liabilities is set out in its Funding Strategy Statement. The statement sets out how the Administering Authority has balanced the conflicting aims of affordability of contributions, transparency of processes, stability of employers' contributions and prudence in the funding basis.

The Pension Fund Actuary is required to report on the "solvency" of the Pension Fund at least every three years. The last actuarial valuation of the Pension Fund was carried out as at 31 March 2016 to determine contribution rates for the financial years 2017/18 to 2019/20, with the new rates effective from 1 April 2017. A copy of the 2016 Valuation Report is accessible from the Pension Fund website: www.yourpension.org.uk/Hertfordshire/Fund-information/Policy-statements.aspx

The market value of the Pension Fund's assets at the valuation date was £3,584m million and represented 91% of the Pension Fund's accrued liabilities, allowing for future pay increases.

In accordance with the Scheme regulations, employer contribution rates were set to meet 100% of the Pension Fund's existing and prospective liabilities.

The main actuarial assumptions were as follows:

Discount rate	4.0%
Salary increases	2.2%
Benefit increases	2.1%

Further information can be found in the Funding Strategy Statement on page 70 and the Actuarial Valuation report on page 17.

6.18 Additional Voluntary Contributions (AVCs)

Scheme members have the option to make AVCs to enhance their pension benefits. These contributions are invested separately from the Pension Fund's assets, with either the Standard Life Assurance Company or the Equitable Life Assurance Society.

6.18 Additional Voluntary Contributions (continued)

2016/17						2017/18					
Standard Life		Equitable Life		Total AVCs		Standard Life		Equitable Life		Total AVCs	
£000s	£000s	£000s	£000s	£000s	£000s	£000s	£000s	£000s	£000s	£000s	£000s
4,961		1,366		6,327	Value at 1 April	4,811		1,337		6,147	
					<u>Income</u>						
295		6		301	Contributions received	315		5		321	
-		-		-	Transfer values received	6		-		6	
295		6		301	Total Income	322		5		327	
					<u>Expenditure</u>						
(1,000)		(100)		(1,100)	Retirement benefits	(745)		(85)		(830)	
(82)		(52)		(134)	Transfer values paid	(2)		(20)		(22)	
-		-		-	Lump sum death benefit	(4)		-		(4)	
(1,082)		(153)		(1,235)	Total Expenditure	(750)		(106)		(856)	
636		118		754	Change in market value	111		28		139	
4,811		1,337		6,147	Value at 31 March	4,493		1,264		5,757	

6.19 Related Parties**a) Hertfordshire County Council**

The County Council incurred costs of £439,524 in relation to the management of the Pension Fund and was subsequently reimbursed by the Pension Fund for these expenses. The County Council also contributed £51,514,441 to the Pension Fund in 2017/18.

b) Pensions Committee

No members of the County Council Pensions Committee were councillor members of the Hertfordshire Local Government Pension Scheme during 2017/18. Each member of the Pensions Committee is required to declare their interests at each meeting.

c) Key Management Personnel

The Administering Authority disclosure of senior officer remuneration includes the S151 Officer who has responsibility for the proper financial administration of the Pension Fund under the Local Government Act 1972.

This Officer was employed by the Administering Authority and spent a proportion of time on the financial management of the Pension Fund. These costs comprise an element of the remuneration from the Pension Fund to the County Council in 2017/18 of £439,524.

The remuneration paid by Hertfordshire County Council to key management personnel of the Pension Fund, apportioned for the proportion of time on the financial management of the Pension Fund, were:

Position	Year	Apportioned salary £	Apportioned pension contributions £	Total apportioned remuneration £
Director of Resources ¹	2017/18	9,684	1,765	11,449
	2016/17	12,741	2,323	15,064

¹ S151 Officer from 22 – 31 March 2016 and 1 April 2016 – 31 March 2017

² S151 Officer from 1 April – 31 August 2015

³ S151 Officer from 1 September 2015 – 22 March 2016

6.20 Contingent Liabilities and Contractual Commitments

The Pension Fund had no contingent liabilities.

At 31 March 2018, the Pension Fund had a contractual commitment of a further £271.0 million (£136.9 million at 31 March 2017) to private equity limited partnerships and private equity funds within the Global Alternatives Fund, based on exchange rates applicable at the balance sheet date.

6.21 Contingent Assets

a) Withholding tax reclaims

The Pension Fund has entered into a process to reclaim withholding tax made by other European Union (EU) countries, based on precedent cases in some EU countries that tax has been withheld unfairly under EU law. Claims have been submitted in France and Germany.

The Pension Fund's claims are set out in the following table in both euros and sterling (calculated using exchange rates as at 31 March 2018). The claims are subject to legal processes but based on precedent and legal advice, the Pension Fund expects to be successful in these claims. Therefore the amounts below are contingent assets for the Pension Fund.

Country	Euro Value at 31 March 2018 € 000s	Sterling Value at 31 March 2018 £ 000s
Germany	148	130
France	191	167
Total	339	297

b) Bonds

28 admitted bodies in the Pension Fund held bonds as surety to guard against the possibility of being unable to meet their pension obligations. These bonds are drawn in favour of the Pension Fund and payment will only be triggered in the event of employer default.

6.22 Investment Strategy Statement

Regulation 7 of the Local Government Pension Scheme (Management and Investment of Funds) Regulations 2016 requires the Pension Fund to publish an Investment Strategy Statement (ISS). The 2018 Investment Strategy Statement, in effect from 1 April 2018 is available on the Pension Fund's website: <https://www.yourpension.org.uk/Hertfordshire/Fund-information/Policy-statements.aspx>

The 2018 Investment Strategy Statement sets out the Fund's:

- Investment Strategy, including 'investment beliefs' and target asset allocation.
- Analysis of and consideration of risk.
- Approach to LGPS pooling;
- Approach to Environmental, Social and corporate Governance (ESG) issues in relation to fund investment.

1. Investment Management

Powers of Investment

The principal powers to invest are contained in the Local Government Pension Scheme (Management and Investment of Funds) Regulations 2016 and require an administering authority to invest any pension fund money that is not needed immediately to make payments from the Pension Fund. The regulations provide a prudential framework within which the Pension Fund's investment strategy should be implemented and managed.

The regulations state that the Administering Authority must, after taking proper advice, formulate an investment strategy which includes:

- a requirement to invest fund money in a wide variety of investments;
- the authority's assessment of the suitability of particular investments and types of investments;
- the authority's approach to risk, including the ways in which risks are to be assessed and managed;
- the authority's approach to pooling investments, including the use of collective investment vehicles and shared services;
- the authority's policy on how social, environmental and corporate governance considerations are taken into account in the selection, non-selection, retention and realisation of investments; and
- the authority's policy on the exercise of the rights (including voting rights) attaching to investments.

When setting its Investment strategy, the Pension Fund is required to have a properly diversified portfolio of assets to reduce overall portfolio risk and volatility and must ensure that the asset allocation policy is compatible with achieving its locally determined solvency target.

The regulations permit a range of investments and the Fund is required to must set out the maximum percentage of the total value of all investments of fund money that it will invest in particular investments or classes of investment.

The Pension Fund's Investment Strategy Statement, which was in force during the 2017/18 financial year is set out on pages 51 – 58. This is also available from the Pension Fund's website:

<https://www.yourpension.org.uk/Hertfordshire/Fund-information/Policy-statements.aspx>

Responsibility for Investing the Pension Fund's Assets

The Pensions Committee of the County Council is responsible for setting the overall investment strategy of the Pension Fund and monitoring investment performance.

The majority of the Pension Fund's investments are managed by external Investment Managers, who have substantial discretionary powers regarding their individual portfolios. The split of the Pension Fund between these managers at 31 March 2018 is shown in the following table.

Investment Manager	Pension Fund %
Allianz Global Investors Europe GmbH	9.8
Baillie Gifford & Co.	14.9
CBRE Global Collective Investors (UK) Ltd	7.4
Jupiter Asset Management Ltd	<0.0
Legal & General Assurance (Pensions Management) Limited	8.3
LGT Capital Partners (Ireland) Ltd	9.5
Royal London Asset management Ltd	13.6
UBS Group AG	33.1
Private Equity	3.4

An amount of cash is held by the County Council in order to manage the payment of members' pension benefits and the collection of contributions. This is invested in accordance with the Pension Fund's Treasury Management Strategy which is reviewed and approved annually by the Pensions Committee. The 2017/18 Treasury Management Strategy was approved by the Pensions Committee on 28 February 2018.

2. Investment Strategy Statement

2.1. Introduction

This is the Investment Strategy Statement (“ISS”) of the Hertfordshire Pension Fund (“the Fund”), which is administered by Hertfordshire County Council, (“the Administering Authority”). The ISS is made in accordance with Regulation 7 of the Local Government Pension Scheme (Management and Investment of Funds) Regulations 2016 (“the Regulations”). This document replaces the Fund’s Statement of Investment Principles.

The ISS has been prepared by the Pension Committee (“the Committee”) having taken advice from the Fund’s investment adviser, Mercer. The Committee acts on the delegated authority of the Administering Authority.

The ISS, which was approved by the Committee on 31 March 2017, is subject to periodic review at a maximum every three years or following any significant change in investment policy. The Committee has provided the Pension Board with an opportunity to review and comment on the contents of the Fund’s investment strategy and will continue to work with the Pension Board to review its operation.

This ISS has been designed to be a living document and is an important governance tool for the Fund. This document sets out the investment strategy of the Fund, provides transparency in relation to how the Fund investments are managed, and acts as a risk register.

The Committee seeks to invest, in accordance with the ISS, any Fund money that is not needed immediately to make payments from the Fund. The ISS should be read in conjunction with the Fund’s Funding Strategy Statement (dated 1 April 2017).

Investment Beliefs

The Committee has, as part of the process of creating this Investment Strategy Statement agreed a set of ‘Investment Beliefs’ which are summarised briefly below:

- All investment decisions should be made on an objective basis supported by the most appropriate evidence available.
- The Hertfordshire Pension Fund has very long term liabilities and it is therefore believed that a long-term approach to investment matters is both appropriate and desirable.
- Risk and return are related. Riskier assets are expected to be held only when there is a reasonable expectation of higher returns being generated. There are some risks for which no additional return is expected; these should be avoided or mitigated.
- Diversification is an effective way of reducing the volatility of an asset portfolio and therefore reducing the volatility of the Pension Fund’s funding level.
- Investment risk is multi-dimensional and complex. The Fund is subject to a range of investment risks which are addressed in the investment strategy-setting process. There are other risks such as regulatory risk, employer risk and longevity risk which are addressed elsewhere.
- Excess returns are not certain. The Committee aims to manage the Fund on a cost-effective basis and seeks correspondingly favourable terms from the Fund’s asset managers. It is also recognised that ‘value for money’ is best considered in terms of ‘net of fees’ returns which the Committee monitors regularly.
- The real world, of economies and markets, is complex. Simple explanations are unlikely to be robust. To reflect this complexity the Committee takes material time and effort to understand the issues with which it is faced and also, from time to time, undertakes training on specific topics from specialist providers.
- Innovation and evolution can be of benefit to the long term investor. A willingness to consider new investment ideas is likely to bring value to the Fund in the longer term, especially if balanced with a consistency of thought and governance processes.
- Environmental, Social and Governance factors cannot be ignored by those responsible for a large and diversified portfolio of assets. In particular, the risks of being exposed to poor ESG practice is likely to be material for the Fund, and the Committee therefore includes, as part of its monitoring processes, reviews of managers’ ESG policies and practices.

2.2. Investment strategy and the process for ensuring suitability of investments

The Fund's objective is to pay benefits as they fall due and this requires the build-up of sufficient reserves in advance. The Fund is currently assessed to have a deficit, in respect of historic benefits accrued, and so the asset strategy is focused on achieving returns in excess of gilts, without taking undue risk in order to reduce this deficit. Having a thorough understanding of the risks facing the Fund is crucial and these are covered later in this statement.

The target asset allocation as at March 2016 for the fund is set out in the table below and has an allocation of 75% to growth assets and 25% to defensive assets:

Asset class	Allocation %	Role (s) within the strategy
Equity: UK Global Total	 16.0 34.2 50.2	Long term growth in excess of gilt returns and expected inflation. Includes diversification of UK and Global equities for market growth and currency exposure
Bonds	25.0	Dampens the volatility of funding level Income generating Liability matching properties Diversification of return source
Property	8.0	Diversification. Generates investment income; Returns expected to be inflation-sensitive Exposure to Illiquidity premium
Alternatives	15.8	Diversified source of returns Some inflation protection Source of income Exposure to illiquidity premium
Cash	1.0	Cash flow to meet statutory liabilities, including monthly pension payroll payments.

The new investment strategy will target an asset allocation of 65% to growth assets, and 35% to defensive assets, of which 10% will be invested in real assets. The Fund will look to deliver this new strategy and asset allocation over the medium term and will work with the Fund's investment consultant to implement this new strategy. The table below provides an overview of the role each asset plays in achieving the Fund's objectives is set out in the table below:

Asset class	Allocation %	Role (s) within the strategy
Equity: UK Global Total	10 30 40.0	Long term growth in excess of gilt returns and expected inflation. Includes diversification of UK and Global equities for market growth and currency exposure
Bonds	25.0	Dampens the volatility of funding level Income generating Liability matching properties Diversification of return source
Property	8.0	Diversification. Generates investment income; Returns expected to be inflation-sensitive Exposure to Illiquidity premium
Alternatives	16.0	Diversified source of returns Some inflation protection Source of income Exposure to illiquidity premium
Real Assets*	10.0	Diversification Generates investment income and some inflation protection Exposure to illiquidity premium
Cash	1.0	Cash flow to meet statutory liabilities, including monthly pension payroll payments.

*The Fund will look to allocate to a range of Real Assets, this is expected to include, although not limited to, High Lease to Value Property (HLV), Infrastructure Debt and Private Residential Property (PRS).

The Committee is responsible for the Fund's asset allocation which is determined via a triennial strategy review as part of the actuarial valuation process, but is kept under constant review; noting that strategic changes are an evolutionary process.

The triennial review looks at both qualitative and quantitative analysis, covering:

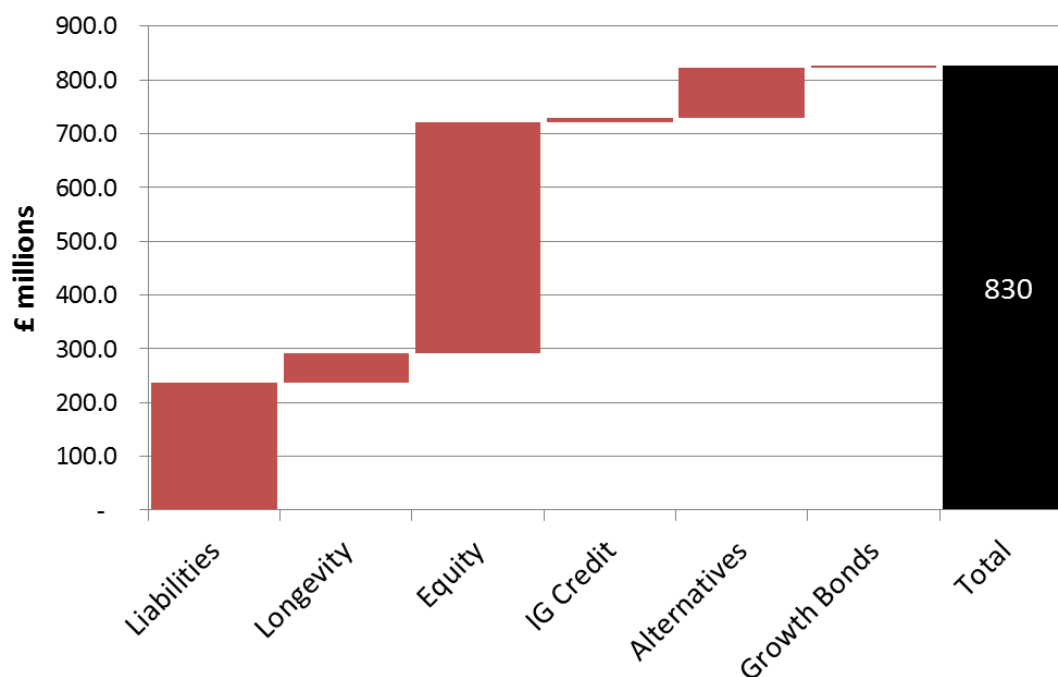
- The required level of return that will mean the Fund can meet its future benefit obligations as they fall due
- The level of risk that the Fund can tolerate in absolute terms, and in relation to its funding level and deficit
- An analysis of the order of magnitude of the various risks facing the Fund is established in order that a priority order for mitigation can be determined
- The desire for diversification across asset class, region, sector, and type of security.

2.3. Risk measurement and management

The Committee assesses risks both qualitatively and quantitatively, with the starting point being the triennial strategy review. Risks are considered, understood and then prioritised accordingly.

Investment Risks

The Fund is exposed to a number of different types of risk of which the most significant are related to investment and market risk. The chart below shows the VaR¹ (Value at Risk, essentially the minimum losses that would occur in a 1-in-20 downside event) facing the Fund, split into major risk categories.



As the above graphic illustrates, equities and liabilities are the greatest sources of risk, although equities are expected to outperform liabilities over the long term, they are the fund's largest single source of risk. The other significant source of risk is from changes in the present value of its liabilities, which is sensitive to changes in gilt yields and inflation expectations. Further detail on the risks and any mitigation actions that the Fund takes to address them are detailed below.

Equities

The largest risk that the Fund is running is in relation to its equity holdings. Should equity market conditions deteriorate significantly this will have a negative impact on the funding level. The Fund holds equities in order to provide the necessary returns to ensure that the Fund remains affordable. The Committee believes that the extra returns that are expected to be generated by equities compensate for the level of risk equities bring to the Fund, but mitigates this risk by investing significant amounts in diversifying assets; bonds, property and alternatives.

The Fund is a long term investor but does require income over and above contributions received in order to pay pensions. A strategy is therefore being developed that would seek additional income from alternative assets and bonds, rather than from equities, in order to avoid being a forced seller at a low point in the market.

Liabilities

The Fund's liabilities are affected by both interest rates (gilt yield) and inflation; the pensions that the Fund will ultimately pay to members are linked to inflation and so as inflation expectations rise so do the expected cashflows that the Fund will have to pay in future. The Fund's liabilities are also sensitive to interest rates because of the method that the actuary uses to place a present value on all the future pension payments. The Fund will seek to invest in a range of assets that:

- provide returns in excess of inflation;
- in some cases provide an inflation-linked income, subject to a tolerable level of volatility;
- are sensitive to interest rates to reduce the impact that changes to the present value of the liabilities have on the funding level.

¹ VaR calculation based on the valuation results of 31 March 2016.
Hertfordshire Pension Fund Annual Report and Accounts 2017/18

Alternatives

The Fund has a significant amount of assets allocated to a range of alternatives, with specific allocations to property and private equity in addition to an alternatives mandate which invests in a range of asset classes. The risks that these investments bring at an individual level are not insignificant but the Committee believe that over the long term alternatives will provide returns that compensate for the risks being run. Additionally the level of diversification the assets provide helps to reduce the Funds reliance on returns from equities. Illiquid assets such as property are also a valuable source of income.

Active Manager Risk

Investment Managers are appointed to manage the Fund's investments on its behalf. This risk is small relative to other risks; nevertheless the Fund still addresses this risk through diversification of its exposure to active managers and careful monitoring of their progress. The Fund maintains a balance between passive and active management; determining the most appropriate approach in relation to the asset class. The Fund has an active risk management programme in place that aims to help it identify the risks being taken and put in place processes to manage, measure, monitor and (where possible) mitigate the risks being taken. Key risks and mitigating controls are incorporated in the Fund's risk register which is monitored on an ongoing basis and reported to the Pensions Committee and LGPS Board quarterly.

The Fund's portfolio is well diversified across asset classes, geography and asset managers. As different asset classes have varying correlations with other asset classes, by investing in a range of different investments, the fund can reduce the total level of risk run to a material extent.

To put some of the above risks into perspective the table below shows how a range of events could impact the Fund:

Event	Event movement in isolation	Impact on Deficit
Fall in equity markets	20% fall in equities	£430m
Rise in expected inflation	1% increase in inflation	£585m
Fall in interest rates	1% fall in interest rates	£585m
Active Manager underperformance	3% underperformance from all active managers	£80m

The other principal risks that the Fund is exposed to can be identified as:

- The Fund's investment strategy and asset allocation does not deliver the long term asset returns and growth required to meet the Fund's liabilities;
- The Funding level of the Pension Fund deteriorates;
- Scheme employers default on meeting their obligations to the Pension Fund and LGPS; and
- Third party risk – failure of Fund providers and regulatory non-compliance.

Details of these risks and a summary of control mechanisms can be found in appendix E of the Fund's funding strategy statement <http://www.yourpension.org.uk/Hertfordshire/Fund-information/Policy-statements.aspx>.

Cashflow Risk

The Fund's cash flow position is currently positive but the Fund is gradually becoming more mature and this position is monitored by the Fund's officers and Fund Actuary at each triennial valuation. This will become an important consideration in setting and monitoring the Fund's investment strategy and asset allocation to illiquid and liquid assets. This issue is currently addressed at total Fund level. As part of the lead up to the next triennial valuation the Fund will look to develop sub-strategies to address the differing funding levels of the employers within the scheme. The Fund also receives investment income which could be used to pay benefits rather than be re-invested if and when the Fund becomes cash flow negative.

Demographic Risk

The Committee reviews the demographic assumptions of the Fund every three years as part of its triennial valuation to mitigate the risk that any changes to longevity and other factors would have on the Fund. Measures to mitigate this risk

Investment Report

include review of employer contributions, asset allocation and bond or other insurance. Further details on the assumptions used in the valuation can be found in appendix C of the Fund's funding strategy statement <http://www.yourpension.org.uk/Hertfordshire/Fund-information/Policy-statements.aspx>.

Fund Governance Risk

The Fund believes that there is a benefit to the Fund to be gained from good governance of its Committee in the form of either an increased return and/or decreased risk. Poor governance can lead to opportunities and risks being missed, and have a detrimental effect on the funding level and deficit.

Details of the Fund's governance structure can be found in the Governance Compliance Statement, details of which can be found in the Annual Report and Accounts <http://www.yourpension.org.uk/Hertfordshire/Fund-information/Annual-reports.aspx>.

Environmental, Social and Governance ('ESG') Risks

The Committee believes that ESG risks should be taken into account on an ongoing basis and are an integral part of the Fund's strategy and objective of being a long term investor.

The Committee believes that engagement with the underlying companies through our investment managers is key in relation to strong corporate governance and managing ESG risks, which in turn will enhance returns. Details of the Fund's policies can be found later in this statement.

Asset Pooling Risk

The Fund is a member of the ACCESS pool and may be exposed to additional risk during the transition of assets to the pool and may incur unexpected costs in relation to the transition of assets among managers. The pool will seek suitable professional advice during this transition period to budget and manage cost.

2.4. Approach to asset pooling

Hertfordshire is a member of the ACCESS pool along with the following 10 other pension funds:

- East Sussex
- Essex
- Hampshire
- Cambridgeshire
- Isle of Wight
- Kent
- Norfolk
- Northamptonshire
- Suffolk
- West Sussex

All eleven funds are committed to working together collaboratively to meet the criteria for pooling and have signed a Memorandum of Understanding to underpin their partnership (will be updated for IAA). ACCESS is working to a project plan in order to create the appropriate means to pool investments. The first investments planned to be pooled in 2018 will be passively-managed investments.

The ACCESS Funds have set out how they meet the pooling criteria, the pool's structure, governance arrangements and services to be shared in the submission made to the Government in July 2016, which is available on ACCESS's website <http://www.accesspool.org/>

All eleven ACCESS funds expect that all investments will be pooled apart from a minority of investments where there is a no value for money benefit to pooling. These have been / will be set out as part of the pooling criteria.

Assets to be invested in the Pool

The Fund's intention is to invest its assets through the ACCESS Pool as and when suitable Pool investment solutions become available. An indicative timetable for investing through the Pool was set out in the July 2016 submission to Government. The key criteria for assessment of Pool solutions will be as follows:

1. That the Pool enables access to an appropriate solution that meets the objectives and benchmark criteria set by the Fund
2. That there is a clear financial benefit to the Fund in investing in the solution offered by the Pool, should a change of provider be necessary.

Assets held outside the pool

At the time of preparing this statement the Fund has elected not to invest the following assets via the ACCESS Pool:

Asset class	Manager	% of Fund assets	Benchmark	Reason for not investing via the ACCESS pool
Private Equity	HarbourVest, Standard Life Capital, Pantheon	3.3%	FTSE All-Share index	Existing illiquid asset programmes will run off at normal lifecycle to avoid crystallising exit costs and loss of illiquidity premium earned.
Alternatives	LGT Capital	9.6%	3 month sterling LIBOR	This mandate is made up of illiquid and liquid asset classes which because of the nature of both the fee structure and legal structure of the entities invested in is likely to make pooling both extremely difficult to implement and significantly more costly for the Fund..
Operational Cash	Hertfordshire County Council	1%	7 day LIBID	The Hertfordshire Pension Fund needs to manage its cash flow to meet statutory liabilities, including monthly pension payroll payments, therefore a reasonable level of operational cash will be held outside the pool.

2.5. Environmental, Social and Corporate governance and the exercise of rights (including voting rights) policies

With regard to responsible investment, the Committee is mindful of the following legal principles, which are based on recent decisions in the courts and which apply to all pension schemes:

- Administering authorities are free to adopt a policy of socially responsible investment, provided that they treat the financial interests of all classes of scheme members as paramount and their investment policies are consistent with the standards of care and prudence required by law.
- Administering authorities are free to avoid certain kinds of prudent investment, which they consider scheme members would regard as objectionable as long as they make equally financial advantageous and prudent investments elsewhere. They may also make “ethical” investments provided these are otherwise justifiable on investment grounds.
- Administering authorities are not entitled to subordinate the interests of members to ethical or social concerns. The financial performance of the Fund consistent with proper diversification and prudence is paramount.

The Committee has a fiduciary duty to invest Fund assets in members’ best interests and so must ensure that assets are invested in an appropriate manner; as a result any ESG considerations must be taken in light of expected return implications.

ESG issues can have a material impact on long-term risk and return outcomes and considering these issues is consistent with the fiduciary duty of the Committee. The Fund is a long-term investor and is committed to being an active owner. It wishes to promote a policy of dialogue on responsible investment issues, through its investment managers, with company management.

The Committee has identified the following ESG issues as a focus for engagement with its managers:

- Environmental issues: including conserving energy, promoting alternative energy sources, recycling, avoiding pollution and using environmentally friendly and sustainable resources
- Human rights: including child labour issues in foreign subsidiaries of UK companies or operations in countries with oppressive regimes
- Employment standards: including equal opportunities, health and safety, trade union recognition and employee participation

Investment Report

The Fund invests via pooled funds and therefore expects its underlying investment managers to exercise voting and engagement rights on its behalf. The Fund is therefore subject to the ESG and voting policies of the individual investment managers. The Committee considers these policies when appointing a new manager and when monitoring investment managers, the Officers consider whether each manager's actions and engagement activities have been appropriate and in keeping with the Fund's policy.

The Fund complies with the UK Stewardship Code ('the Code') and is preparing a formal statement of compliance with the Code for assessment. The Fund encourages its underlying investment managers to comply with the Code.

It is proposed to monitor action by investment managers on a quarterly basis and further develop this policy on an annual basis on the basis of experience. The Committee will also receive an annual report from its Investment Consultant on the ESG credentials of its investment managers.

Myners Principles

Although no longer referenced in the Regulations, the Committee considers that assessment of compliance with the Myners Principles is a valuable governance tool. A copy of the Fund's Myners Compliance Statement can be found in the Annual Report and Accounts. <http://www.yourpension.org.uk/Hertfordshire/Fund-information/Annual-reports.aspx>.

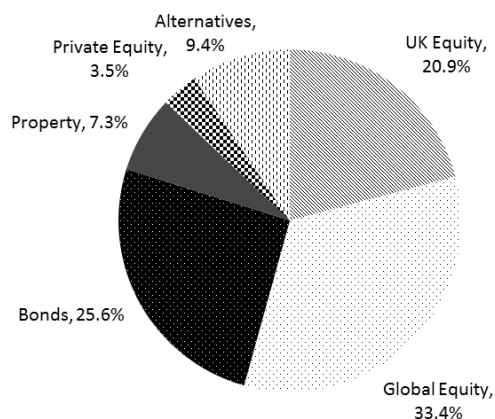
Investment Report

3. Investment Policy

The Investment Strategy Statement, on page 51, sets out the target asset allocation of the Pension Fund for 2017/18, in comparison with the Pension Fund's specific benchmark allocation.

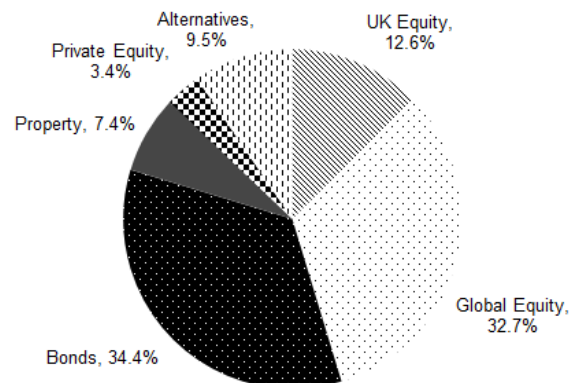
The actual distribution of the Pension Fund's assets across the main asset classes as at 31 March 2018 (and as at 31 March 2017 for comparison) are shown below:

Distribution of the Pension Fund at 31 March 2017



May not sum due to rounding

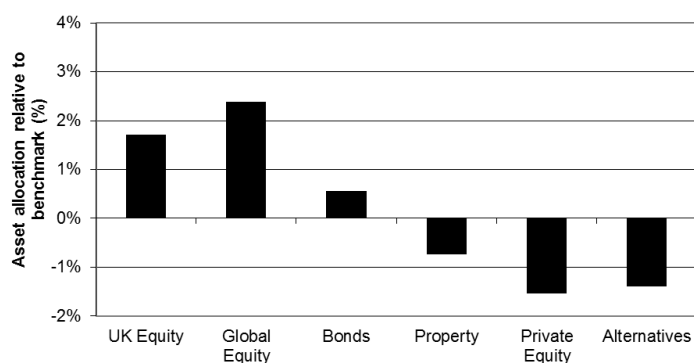
Distribution of the Pension Fund at 31 March 2018



The change in the asset distribution over the period reflects the investment strategy decisions undertaken, in particular moving from UK equities into bonds.

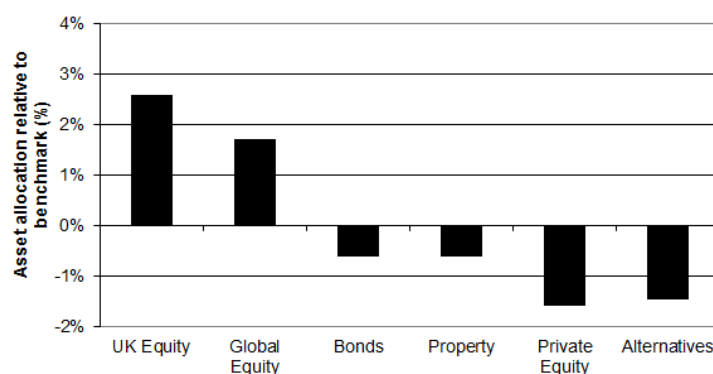
The actual asset allocation of the Pension Fund relative to the benchmark allocation is outlined below as at 31 March 2018 (with 31 March 2017 also shown for comparison):

Actual asset allocation relative to benchmark allocation as at 31 March 2017



May not sum due to rounding

Actual asset allocation relative to benchmark allocation as at 31 March 2018

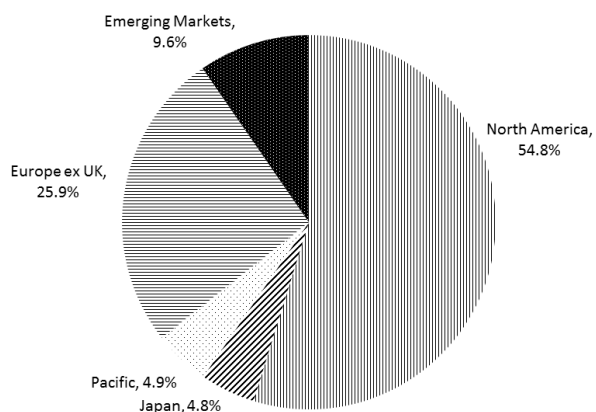


As at 31 March 2018, the Pension Fund's allocations to UK and Global equities were overweight relative to the benchmark allocation, with other allocations underweight, particularly Private Equity and Alternatives.

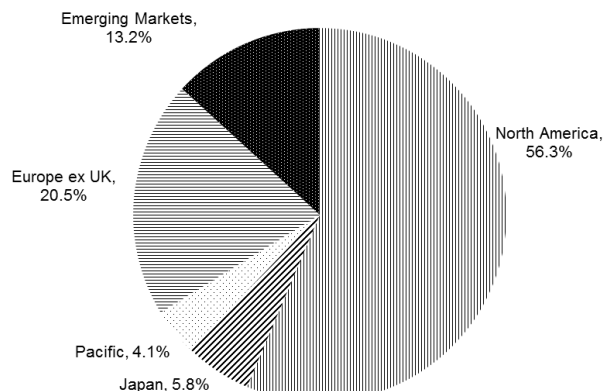
Investment Report

The regional distribution of the Pension Fund's overseas equity investments as at 31 March 2018 (and as at 31 March 2017 for comparison) is shown below:

Distribution of Pension Fund's Overseas equity investments at 31 March 2017



Distribution of Pension Fund's Overseas equity investments at 31 March 2018



May not sum due to rounding

The top ten largest equity holdings of the Pension Fund as at 31 March 2018 (and as at 31 March 2017 for comparison) are shown below.

Ten Largest Equity Holdings at 31 March 2018	Market Value (£millions)	% of Total Investments
Prudential	30.2	0.7
Royal Dutch Shell 'B' Shares	19.7	0.4
Unilever	17.6	0.4
Ashtead Group	15.6	0.3
British American Tobacco	15.5	0.3
Microsoft	15.5	0.3
St James's Place	14.8	0.3
Diageo	14.2	0.3
BHP Billiton	14.2	0.3
United Health	13.5	0.3

Ten Largest Equity Holdings at 31 March 2017	Market Value (£millions)	% of Total Investments
Prudential	24.7	0.6
Ashtead Group	21.3	0.5
Legal & General Group	20.4	0.5
British American Tobacco	19.8	0.5
Bunzl	19.6	0.5
Royal Dutch Shell 'B' Shares	18.9	0.5
Relx	18.6	0.4
Microsoft	18.3	0.4
United Health	17.5	0.4
Unilever	17.2	0.4

4. Review of World Markets (courtesy of Mercers)

Investment Markets²

Over the 12 month period to 31 March 2018, growth assets generally performed well against a backdrop of broad economic expansion, while defensive assets saw lower returns. Over the first quarter of 2018, however, equity markets experienced a downturn. This shift in market sentiment was largely a reaction to a combination of escalating trade and geo-political tensions along with expectations of monetary tightening, especially in the US.

Even though economic activity and business, as well as consumer confidence, improved significantly over the year, concerns have started to surface that some economies, most notably the US, might be starting to overheat which would accelerate the tightening cycle by central banks. Persistent geopolitical tensions over the year, both on the Korean peninsula and in the Middle East, as well as rising trade tensions between the US and China in the first quarter of 2018 also weighed on financial markets and fuelled a resurgence in volatility, which had been abnormally low in the previous year.

In the UK, Brexit continues to remain at the forefront of investors' minds. Since the triggering of Article 50 in March 2017 by Prime Minister Theresa May, some progress has been made but complex negotiations with regards to a future trade deal and the Irish border lie ahead. The UK economy has held up reasonably well over 2017 with real GDP growth of 1.4% while the consensus forecast for 2018 is for 1.6% growth. An increase in inflation over the year prompted the Bank of England to increase the base rate in November 2017 for the first time in 10 years; the Consumer Price Index reached 3.0% at the end of the year even though inflation seemed to have peaked in November 2017 at 3.1% and has fallen back to 2.5% in March 2018. Currency volatility was a feature of the 12 month period, with sterling rallying against the yen and dollar, but falling against the euro.

Equities

At a global level, developed markets as measured by the FTSE World Index, returned 2.6%. Meanwhile, a return of 8.8% was recorded by the FTSE All World Emerging Markets Index. At a regional level, European markets returned 4.3% as measured by the FTSE World Europe ex UK Index. At a country level, UK stocks as measured by the FTSE All Share Index returned 1.3%. The FTSE USA Index returned 1.8% while the FTSE Japan Index returned 7.5%.

Equity market total return figures are in sterling terms over the 12 month period to 31 March 2018.

Within equity markets emerging market returns were the strongest as the region has benefited from a declining US dollar and improved corporate earnings, however considerable dispersion in the returns of emerging market economies persists.

Bonds

UK Government Bonds, as measured by the FTSE Gilts All Stocks Index, returned 0.5%, while long dated issues as measured by the corresponding Over 15 Year Index returned 2.2% over the year. The yield for the FTSE Gilts All Stocks Index rose marginally over the year from 1.44% to 1.54%. The FTSE Over 5 Year Index Linked Gilts Index returned 0.7%.

UK corporate bonds, as measured by the Bank of America Merrill Lynch Sterling Non-Gilts Index, returned 1.3%.

Bond market total return figures are in sterling terms over the 12 month period to 31 March 2018.

Property³

UK property investors continued to experience strong returns. Over the 12 month period to 31 March 2018, the IPD UK All Property Index returned 11.3%. The three main sectors of the UK Property market each recorded positive returns over the period (retail: 7.1%; office: 8.6%; and; industrial 21.6%).

Commodities

The price of Brent Crude increased 33.2% from \$52.62 to \$70.09 per barrel over the one year period. Over the same period, the price of Gold rose 6.1% from \$1247.25 per troy ounce to \$1323.43. The S&P GSCI Commodity Spot Index returned 4.0% over the one year period to 31 March 2018 in sterling terms.

² Statistics sourced from Thomson Reuters Datastream unless otherwise specified.

³ Statistics sourced from MSCI Investment Property Database.
Hertfordshire Pension Fund Annual Report and Accounts 2017/18

Investment Report

Currencies

Over the 12 month period to 31 March 2018, sterling rose 12.2% against the US dollar from \$1.25 to \$1.40 and 7.1% against the yen from ¥139.34 to ¥149.19. Sterling depreciated against the euro by 2.4% from €1.17 to €1.14 over the same period.

5. Investment Performance

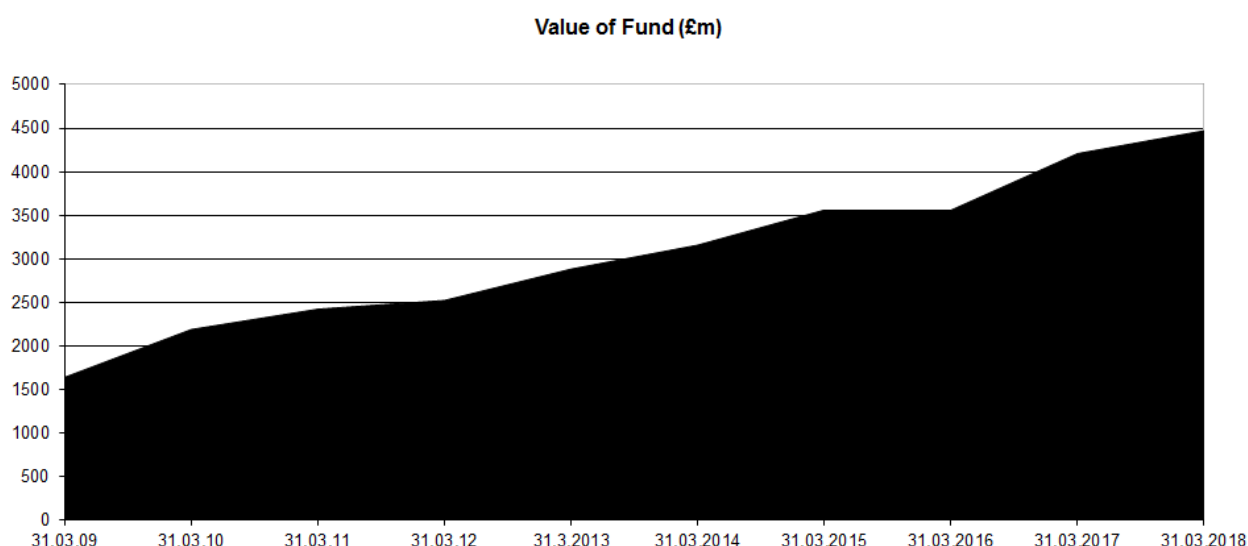
In order to monitor the performance of the investment managers, the Pension Fund participates in performance measurement services. In 2017/18 these services were provided by BNY Mellon Asset Servicing B.V. and Mercer. The performance of the investment managers is reported to the Pensions Committee on a quarterly basis.

Over the twelve months to 31 March 2018, the Pension Fund return was 5.7% (gross of fees) and 5.5% (net of manager fees). The performance of the Pension Fund against benchmark is shown in the table below, along with comparative figures for the previous year.

	Fund return %	Benchmark return %	Relative return %
2017/18	5.5	3.5	2.0
2016/17	17.8	17.9	-0.1

Change in the Pension Fund's Total Assets

The change in the value of the Pension Fund's invested assets over the nine years to 2017/18 is shown below.

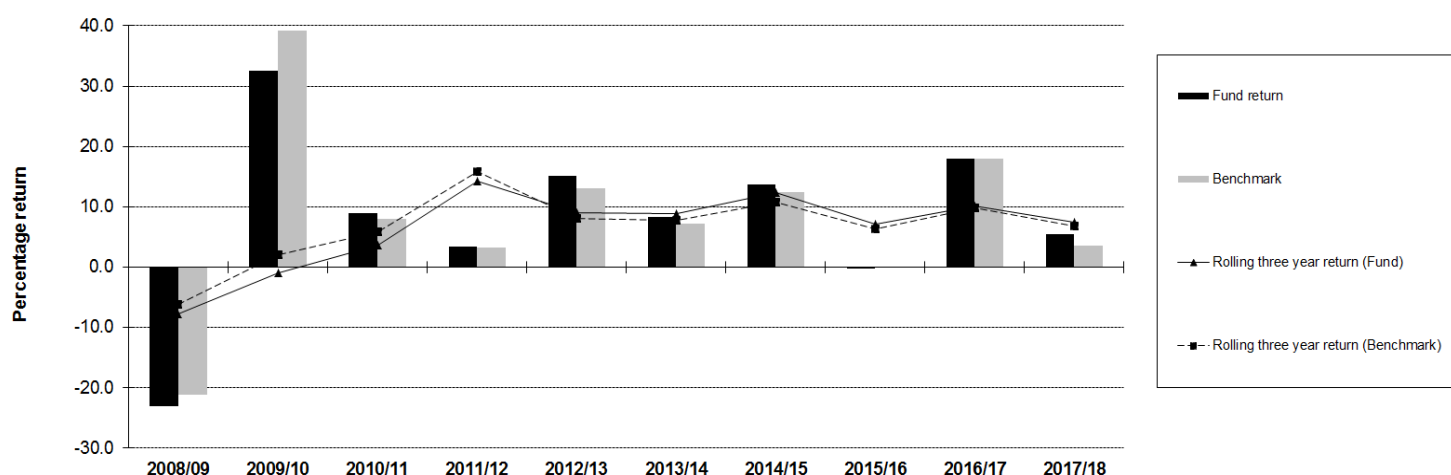


Comparison with the Pension Fund's Benchmark

The Pension Fund's performance is analysed against a customised benchmark, as set out in the Investment Strategy Statement on pages 51-58. The graph below shows the annual investment returns (gross of fees) of the Pension Fund compared to the benchmark over the last ten years. This shows that the Pension Fund has performed above benchmark in seven years out of the last ten.

Overlaid on the chart is a rolling three year annualised return of the Fund's assets compared with the equivalent figures for the benchmark.

Pension Fund performance over 10 years relative to benchmark



The table below shows the long term performance of the Pension Fund to 31 March 2018 against the benchmark.

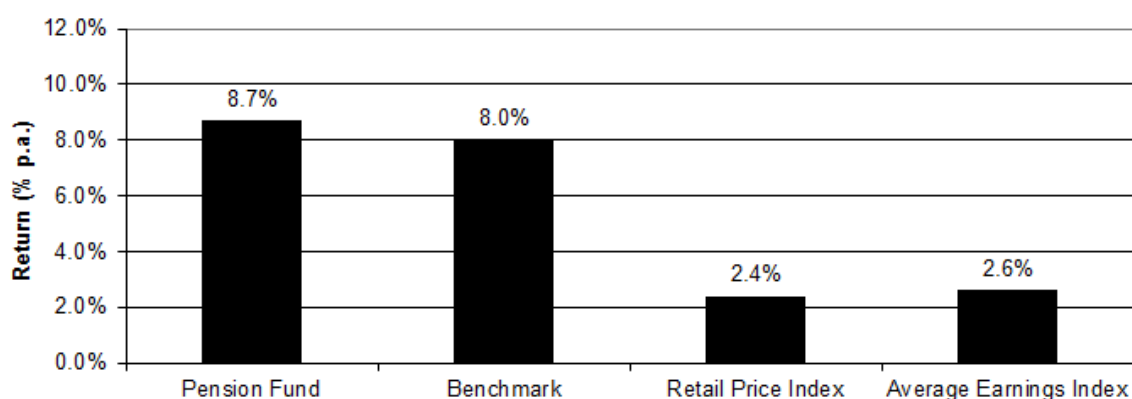
	Pension Fund	Benchmark	Relative Performance
3 year % per annum	7.5	6.8	0.7
5 year % per annum	8.9	8.0	0.9
10 year % per annum	7.3	7.3	0.0

Performance Comparisons

Long Term Returns

The five year returns from 2013/14 to 2017/18 are shown in the chart below:

Five year returns (2013/14 - 2017/18)

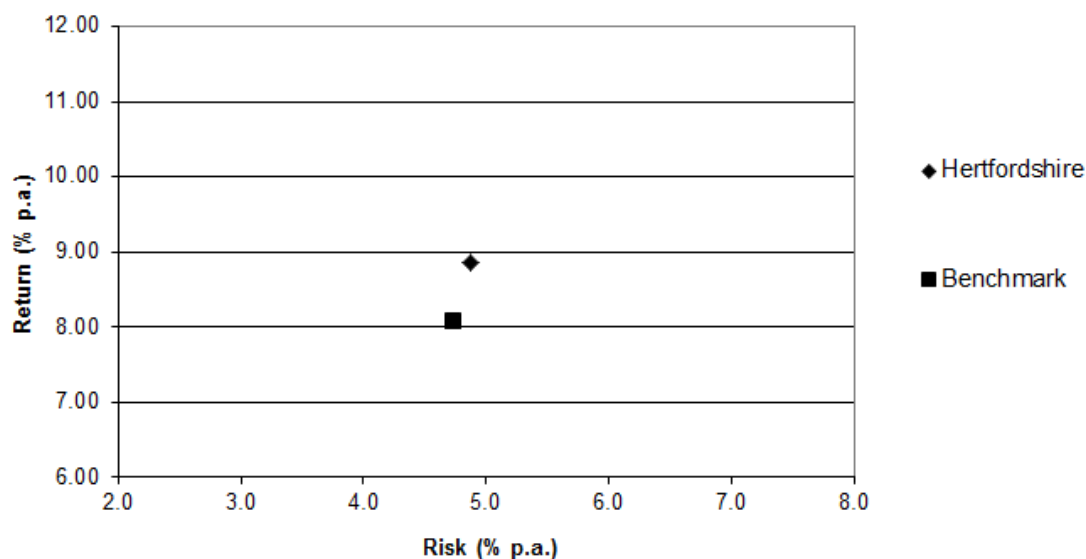


The chart above shows that over the last five financial years, the Pension Fund's performance outperformed retail price inflation and the rate of growth in average earnings.

Risk comparisons

The chart below highlights the risk and return profile of Pension Fund relative to its benchmark over the last five years to 31 March 2018.

5 year risk / return profile



Risk is defined as the volatility or annualised standard deviation of quarterly returns.

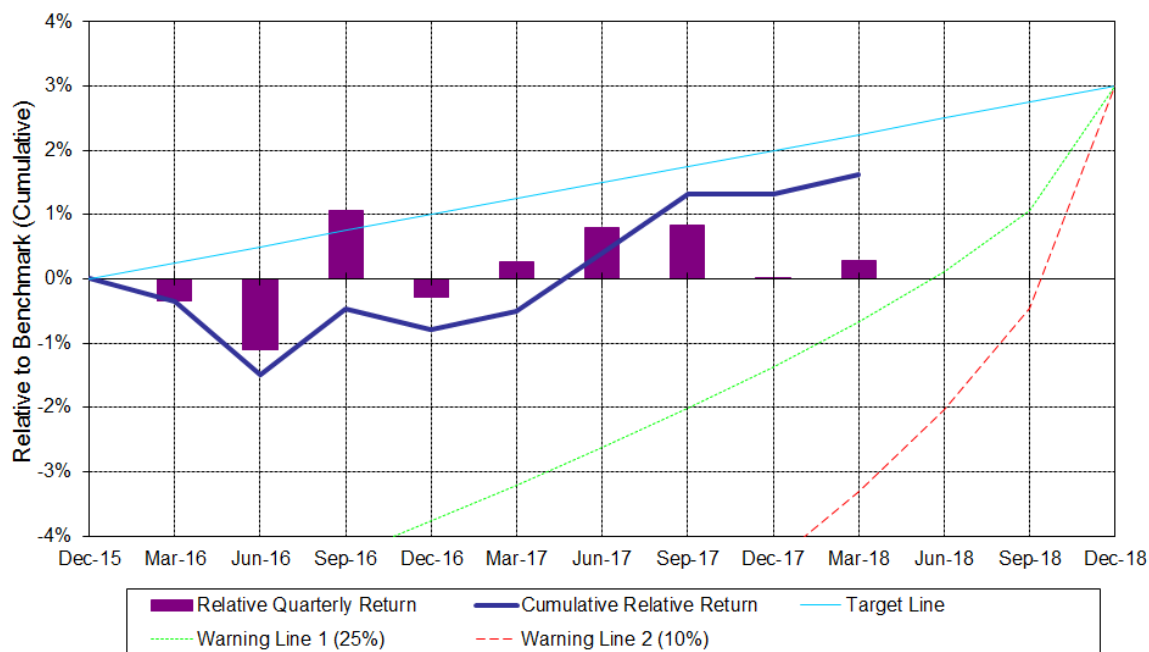
This highlights that the Pension Fund's returns have been marginally more volatile than the Pension Fund's benchmark. The Pension Fund did however generate higher returns than the benchmark over this period.

Control chart

The control chart below highlights the performance of the Pension Fund over time against its targets to put into perspective any significant deviation from the target.

The chart spans three years as this is the time period over which the majority of the managers are expected to meet their target.

Total Fund - Performance from 31 December 2015 (Net of Fees)



The Benchmark Return

This is the horizontal line, at point 0%, representing the benchmark return. If the Fund's performance was exactly in line with the benchmark return, the performance line (see below) would follow this horizontal line exactly.

Relative Quarterly Return

The bars represent the difference between the Fund's investment returns from those of the benchmark over each quarterly period. A positive bar (above zero) represents positive performance and a negative bar (below zero) represents negative performance.

Cumulative Relative Return

This solid line represents the cumulative performance achieved relative to the benchmark return. Because active investment management produces uneven returns, the performance is not expected to exactly follow the target line. Instead the performance will fluctuate with the objective that the performance line will meet or exceed the target line by the end of the period.

The Target Line

This is a simplistic representation of cumulative added value over the period. If, for example, a manager has a target to achieve a return of 0.5% p.a. in excess of the benchmark return, the graph will show the target of 1.5% added value by the end of the three year period. This is shown as a thin black line.

The Warning Line 1 (25%)

Investment managers operate with different styles and the degree of volatility experienced during their progress towards the target will vary between managers. In order to give an indication of an "acceptable" level of volatility we have included a warning line (25%). This line is drawn in such a way that we would expect variations in cumulative performance not to bring the performance line below the warning line under normal circumstances.

The warning line is plotted such that at any point above the line there is a better than a one in four chance (this level of chance is thought to be appropriate) of the target being reached within the time frame, while below the line the chance is less than one in four.

The Warning Line 2 (10%)

The warning line (10%) is similar to the warning line (25%) but the chance of meeting the original target at this level is much lower – one in ten.

ACTIVE EMPLOYERS

Scheduled Bodies

Councils and other bodies whose employees have a statutory right to be in the Scheme

Broxbourne Borough Council	Police Chief Constabulary
Dacorum Borough Council	St Albans District Council
East Herts District Council	Stevenage Borough Council
Hertford Regional College	Three Rivers District Council
Hertfordshire County Council (including schools)	University of Hertfordshire
Hertsmere Borough Council	Watford Borough Council
North Hertfordshire College	Welwyn Hatfield Borough Council
North Hertfordshire District Council	West Hertfordshire College
Oaklands College	West Herts Crematorium
Police and Crime Commissioner	

Academies, Free Schools, Studio Schools and Technical Schools

Adeyfield School	Mandeville Primary School
Alban City School	Manor Fields Primary School
Alban Wood Primary School	Marlborough School Science College
Applecroft Academy	Meryfield Community Primary School
Ascot Road Community Free School	Monkswalk School
Beaumont School	Mount Grace School
Bedmond Academy	Nicholas Breakspear Catholic School
Beechfield Primary School	Northgate Primary School
Birchwood High School	Onslow St Audreys School
Bishops Hatfield Girls School	Our Lady Catholic Primary School
Bovingdon Primary School	Oxhey Wood Primary
Broadfield Academy	Parmiter's School
Bromet Primary School	Pinewood School
Broxbourne Academy	Presdales School
Bushey Academy	Queens School
Bushey Meads School	Ralph Sadlier School
Camps Hill Academy	Richard Hale School
Chaulden Junior School	Rickmansworth School
Chauncy School	Robert Barclay Academy
Cherry Tree Primary School	Roebuck Academy
Christ Church Church of England School	Roselands School
Churchfield Primary Academy	Roundwood Park School
Countess Anne Academy	Samuel Ryder Academy
Crabtree Infants School	Sandringham School
Crabtree Junior School	Scholars' Education Trust - Central Team
Cranbourne School	Simon Balle School
Croxley Danes Academy	Sir John Lawes School
Dame Alice Owens School	Sir Thomas More School
Elstree UTC	St Joan of Arc School
Fair Field School	St Albans Girls School

Appendix 1: List of Employing Bodies

Fairlands Academy	St Catherine of Siena School
Flamstead End Primary & Nursery	St Clement Danes School
Fleetville Infants School	St George's School
Fleetville Juniors School	St John's CoE Primary Sch
Francis Combe Academy	St John's School
Freman College	St Mary's Catholic School
Garden City Academy	St Mary's Cof E High School
Goffs Churchgate Academy	St Michael's School
Goff's School	Stanborough School
Grange Junior School	Summercroft Primary School
Grove Road Primary School	The Barclay School
Hailey Hall School	The Grove Academy
Haileybury Turnford School	The Highfield School
Hammond Primary School	The Orchard Primary School
Harpenden Academy	The Reach Free School
Hartsbourne Academy	Greneway Academy
Hatfield Community Free School	Meridian Academy
Herts and Essex Academy	Roysia Academy
Hertswood School	The Sele School
Hitchin Boys School	The Watford UTC
Hitchin Girls School	The Wroxham School
John Henry Newman	Thomas Alleyne School
John Warner School	Tring School
Jupiter Community Free School	Verulam School
Kings Langley School	Warren Dell Primary School
Knights Templar School	Waterside Academy
Knightsfield	Watford Grammar School for Boys
Lanchester Community Free School	Watford Grammar School for Girls
Larwood School	West Herts Community Free School
Laurance Haines School	Westfield Academy
Leventhorpe School	Wilbury Junior School
Links ESC	Wilshire Dacre Academy
Little Reddings Primary School	Windhill21 (Windhill School)
Longdean School	Woolgrove School
Loreto College	Yavneh College

Employers who can designate their employees to be in the Scheme

Abbots Langley Parish Council	Markyate Parish Council
Aldenham Parish Council	Nash Mills Parish Council
Ashwell Parish Council	North Mymms Parish Council
Berkhamsted Town Council	Redbourn Parish Council
Bishop's Stortford Town Council	Royston Town Council
Buntingford Town Council	Sandridge Parish Council
Chipperfield Parish Council	Sawbridgeworth Town Council
Chorleywood Parish Council	South Mimms Parish Council
Colney Heath Parish Council	St Stephens Parish Council
Croxley Green Parish Council	Stanstead Abbots Parish Council

Appendix 1: List of Employing Bodies

E2BN	Stanstead St Margarets Parish Council
Elstree & Borehamwood Town Council	Tring Town Council
Harpenden Town Council	University Bus
Hatfield Town Council	Walkern Parish Council
Hertford Town Council	Ware Town Council
Kimpton Parish Council	Watford Rural Parish Council
Kings Langley Parish Council	Welwyn Parish Council
Knebworth Parish Council	Wheathamsted Parish Council
London Colney Parish Council	Woolmer Green Parish Council

Admitted Bodies (employers who participate by virtue of an admission agreement)

Amey	Letchworth Garden City Heritage Foundation
B3 Living (formerly Broxbourne Housing Association)	Mears Building Contractors Ltd
Barnados (Hoddesdon)	Mountain Healthcare Ltd
Citizens Advice Bureau in Hertsmere	North Hertfordshire Homes
Citizens Advice Service in Three Rivers	NSL
Compass Contract Services Ltd	Office and General (Uni of Herts)
CP Plus Limited	Opus (UK) Ltd
Crime Reduction Initiative	Quantum Care Ltd
Cucina (Hertswood Academy)*	Radlett Centre Trust
Dacorum Sports Trust	Ringway Infrastructure Service
Elstree Film Studio	RM Education Ltd (Bishops Hat)
Engie Colfey (previous Balfour Beatty)	Securitas Security Services
Evergreen Cleaning Co (Hemel)	Serco (Welwyn Hatfield BC)*
Fusion Lifestyle	Sopra Steria Ltd
Geoffrey Osborne Ltd	Sopra Steria Ltd (Brox)
Goldsborough Home Care	Sports and Leisure Management*
Hertfordshire Action on Disability	St Mary's Trading (All Sorts)
Hertfordshire Association of Local Councils	Stevenage Leisure Limited*
Hertfordshire Catering Limited	Three Rivers West Trust
Hertfordshire NHS Partnership Trust	Thrive Homes
Herts Community Meals	Udata Infrastructure UK Ltd
Herts for Learning	Veolia*
Hertsmere Leisure Trust	Watford and District YMCA
Highfield Park Trust	Watford Community Housing Trust
Hitchin Markets Ltd	Welwyn Hatfield Leisure Limited
John O'Conner (Grounds Maintenance)	YMCA - (Royston & Buntingford)

* Employer with more than one admission agreement relative to the service contracts they have with Scheduled Bodies

CEASED EMPLOYERS

Employers with no active members but with some outstanding liabilities whose pensioners are or will be paid from the Pension Fund

Scheduled Bodies

Codicote Parish Council	Magistrates Courts Committee
Da Vinci Studio School (North Herts School Trust)	Shenley Parish Council
Letchworth Garden City Council	

Admitted Bodies

Abbots Care (Watford)	Hertfordshire Care Trust
ABM Catering Ltd	Hertfordshire Career Services Ltd
Action for Children	Hertfordshire E-Learning Partnership
Affinity Sutton	Hertfordshire Training & Enterprise Council
Age Concern Hertfordshire	Herts Family Mediation Service
Aldenham Renaissance Ltd	Hertsmere Leisure Trust (Sopwell)
ARP Trading	Kameleon 4
Art Café	Lee Valley Water
Aspire Leisure Trust	Leonard Cheshire
Association of Charity Officers	MACE Ltd
Bushey Citizens Advice Bureau	Mitie Property Services
Capita Secure Info Solutions	National Car Parks
Carers in Hertfordshire	North Hertfordshire Hospice Care Association
Caterplus	Northgate Information Solutions
Central Parking Systems	Office and General
Chauncy Housing Association	Offley Place Ltd
Churchill Contract Services Limited	Pre-school Learning Alliance (Holywell School)
Colesseum Theatre	Principle Cleaning
Colne Valley Water Company	Pro Action
Comfort Call (Brox)	Rhodes Museum Foundation
Commission for New Towns - Hemel Hempstead	Rickmansworth & Uxbridge Valley Water Company
Commission for New Towns - Stevenage	Riversmead Housing Association
Community Building Services	Shenley Park Trust
Dacorum Council for Voluntary Service	Society of Education Officers
DC Leisure Management Ltd	St Albans Diocesan Board for Social Responsibility
Department of Transport - Motor Tax	Stevenage Homes
Digica FMS	Superclean Services Wolthorpe Ltd
East Herts Citizens Advice Service	Thames Water Authority
Edwards & Blake Ltd (Praewood School)	The Fairway Public House Limited
EEIDB	Town & County Markets
Elior UK	TSG Mechanical Services Ltd
Europa Services Limited	Watford & Three Rivers Trust
Exemplas	Watford Town Centre Partnership Limited
Gosling Sports Park	Wellfield Trust
Group for the Rootless of Watford	Welwyn and Hatfield Community Housing Trust
Haywards Services Ltd (W&H)	West Hertfordshire Computer Consortium
Hemel Hempstead Day Centre Ltd	Weston Voluntary Nursery
Hertford Museum Trust	Womans Royal Voluntary Society

1 Introduction

1.1 What is this document?

This is the Funding Strategy Statement (FSS) of the Hertfordshire Pension Fund (“the Fund”), which is administered by Hertfordshire 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 31 March 2018.

1.2 What is the Hertfordshire 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 Hertfordshire Fund, in effect the LGPS for the Hertfordshire 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 A.

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.

The requirement to maintain and publish an FSS is also contained in the LGPS Regulations, as set out in Appendix B.

The FSS is a summary of the Fund’s approach to funding its liabilities and when other funding decisions are required, for example when employers join or leave the Fund. 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 and cessations;
- actuarial factors for valuing individual transfers, early retirement costs and the costs of buying added service; and

- The Fund's Investment Strategy Statement (see section 4 Funding Strategy and links to Investment Strategy)

2 Funding strategy and links to investment strategy

Further details on the Pension Fund's policies and strategies can be found on the Pension Fund's website at:

<http://www.yourpension.org.uk/Hertfordshire/Fund-information/Policy-statements.aspx>

2.1 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, 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.

2.2 What does the FSS aim to do?

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

- 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;
- 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.

2.3 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:

- A. The responsibilities of key parties
- B. The regulatory framework, including how and when the FSS is reviewed,
- C. The calculation of employer contributions
- D. The Actuarial assumptions which the Fund Actuary currently makes about the future,
- E. Key risks and controls for the Fund ,
- F. Glossary

If you have any other queries please contact the Pensions Team at Pensions.Team@hertfordshire.gov.uk.

3 Basic Funding issues

3.1 How does the actuary measure the required contribution rate?

In essence this is a three-step process:

- 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 C for more details of what assumptions we make to determine that funding target;
- Determine the time horizon over which the employer should aim to achieve that funding target. See the table in section 4.3 and Note (c) for more details;
- 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 3.4 below and the table in 4.3 Note (e) for more details.

3.2 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*". Payment of the Secondary rate will aim to return the employer to, or protect, a fully funded position 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. Further detail can be found in section D3.

The rates for all employers are shown in the Fund's Rates and Adjustments Certificate, which forms part of the formal Actuarial Valuation Report (<http://www.yourpension.org.uk/Hertfordshire/Fund-information/Policy-statements.aspx>). Employers' contributions are expressed as minima, with employers able to pay contributions at a higher rate. Any additional contributions over and above the certified rate will be considered by the Fund actuary at subsequent valuations, i.e. will be reflected as a credit when next calculating the employer's contributions.

3.3 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, largely a result of schools transferring to academy status and services being outsourced from scheme employers such as Councils.

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.

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 Pension 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

Appendix 2: Funding Strategy Statement

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 a 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. 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 as we consider it to be helpful in setting funding strategies for these different employers.

3.4 How does the contribution rate vary for different employers?

All three steps outlined in section 2.1 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). An employer's individual funding target is set so that there are sufficient assets to pay for all accrued benefits at the end of its participation in the Fund and that the employers liabilities do not fall on other employers in the Fund in the future;
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).

3.5 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 ratio 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.

3.6 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. However, this is balanced against the following considerations:

- 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.

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, as discussed in section 3. In deciding which of these techniques to apply to any given employer, the Fund will consider a risk assessment of that employer using a knowledge base which is regularly monitored and kept up-to-date. This database will include such information as the type of employer, its membership profile and funding position, any guarantors or security provision, material changes anticipated, etc. This helps the Fund establish a picture of the financial standing of the employer, i.e. its ability to meet its long term Fund commitments. To ensure that the information is kept up to date, employers are required to complete an annual survey to confirm the accuracy of information held on the database.

Where an employer is considered relatively low risk 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.

An employer whose risk assessment indicates a less strong covenant i.e. their assessed financial strength in regards to their ability to pay for pension obligations in the long run, will generally be required to pay higher contributions (for instance, with a higher funding target, and/or a shorter deficit recovery period relative to other employers, and/or a higher probability of achieving the target). This is because of the higher probability that at some point it will fail or be unable to meet its pension contributions, with its deficit in the Fund then falling to other Fund employers, or because the employer has less time to meet its obligations to the Fund.

4 Calculating contributions for individual Employers

4.1 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.

4.2 The effect of paying contributions below the measured level

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 time horizons;
- adjusting the required probability of meeting the funding target;
- the phasing in of contribution rises or reductions;
- the pooling of contributions amongst employers with similar characteristics; and/or
- the use of some form of security or guarantee to justify a lower 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 the measured contribution rate. 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 choice of method,
- 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.

Section 3.3 summarises how the main funding policies differ for different types of employer, followed by more detailed notes where necessary. Section 3.4 onwards deals with funding issues which apply to all employers.

4.3 The different approaches used for different employers

Type of employer	Scheduled Bodies			Designating Employers	Community Admission Bodies		Transferee Admission Bodies
Sub-type	Local Authorities & Police	Academies	Other scheduled bodies	Parish & Town Councils	Open to new entrants	Closed to new entrants	
Funding Target Basis used	Ongoing, assumes long-term Fund participation (see Appendix C)				Ongoing, but may move to “gilts basis” - see note (a)		Ongoing, assumes fixed contract term in the Fund (see Appendix C)
Primary rate approach	(see Appendix D, section D.2)						
Stabilised contribution rate?	Yes see note (b)	Yes see note (b)	No	No	No	No	No
Maximum time horizon see note (c)	20 years	20 years	20 years	17 years	Future working lifetime of members	Future working lifetime of members	Outstanding contract term, or future working lifetime of members (if shorter)
Secondary rate see note (d)	% of payroll or monetary amount	% of payroll	% of payroll or monetary amount	% of payroll	% of payroll or monetary amount	Monetary amount	% of payroll or monetary amount
Treatment of surplus	Covered by stabilisation arrangement	Covered by stabilisation arrangement	Preferred approach: contributions kept at future service rate. However, reductions may be permitted by the Admin. Authority				Reduce contributions by spreading the surplus over the remaining contract term
Probability of achieving target see note (e)	66%	66%	66% - 70%	66%	66% - 80%	66% - 80%	66-75%
Phasing of contribution changes	Covered by stabilisation arrangement	Covered by stabilisation arrangement	Max 3 years	Max 3 years	Max 3 years	Max 3 years	None
Review of rates see 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 at regular intervals in last 3 years of contract
New employer	n/a	see note (g)	n/a	See section 2.3	See note (h)		See notes (h) & (i)
Cessation of participation: cessation debt payable	Cessation is assumed not to be generally possible, as Scheduled Bodies are legally obliged to participate in the LGPS. In the rare event of cessation occurring, 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 assumed to expire at the end of the contract. Cessation debt calculated on ongoing basis. Awarding Authority liable for future deficits and contributions arising.

Note (a) Basis for CABs closed to new entrants

In the circumstances where:

- the employer is an Admission Body but not a Transferee Admission Body, and
- the employer has no guarantor for future deficits and contributions, 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 Admission Bodies whose admission agreement is open or where there is no immediate expectation that the admission agreement will cease, where there is no guarantor for future deficits and contributions, or where the strength of covenant is considered to be weak.

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.

In general, stabilisation will only be considered for employers who are:

- Scheduled bodies that have tax raising powers, or are part of a pool
- Open to new entrants
- Have a long term time horizon in the Fund
- Have been assessed as having a strong employer covenant so as to protect the Fund and the other employers in the Fund against the risk of the employer defaulting in relation to its liabilities.

The current stabilisation mechanism applies if:

- the employer satisfies the eligibility criteria set by the Administering Authority, as set out above 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).

On the basis of extensive modelling carried out for the 2016 valuation exercise (see Section 4), the stabilisation parameters have been set allowing for increases/decreased of 0% to 1.5% of pay.

The stabilisation criteria and limits will be reviewed at the 31 March 2019 valuation, to take effect from 1 April 2020.

Note (c) Maximum time horizon

Appendix 2: Funding Strategy Statement 2017

The maximum time horizon starts at the commencement of the revised contribution rate (1 April 2018 for the 2017 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

For employers where stabilisation is not being applied, the Secondary contribution rate for each employer covering the three year period until the next valuation will often be set as a percentage of salaries. However, the Administering Authority reserves the right to amend these rates between valuations and/or to require these payments in monetary terms instead, for instance where:

- the employer is relatively mature, i.e. has a large Secondary contribution rate (e.g. above 15% of payroll), or
- there has been a significant reduction in payroll due to outsourcing or redundancy exercises, or
- the employer has closed the Fund to new entrants.

Note (e) Probability of achieving funding target

Each employer has their 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.

Note (f) Regular Reviews

The Fund reserves the right to review contribution rates and amounts, and the level of security provided, at regular intervals between Valuations. 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 the scheme in its own right.
- 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. Schools that convert to Academy status who are already in the Schools & Academies Pool will continue to pay the prevailing rate of the pool until the next Triennial Valuation, at which they have the opportunity to opt out if they wish to have an individual employer contribution rate calculated;

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 (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.

Any security must be to the satisfaction of the Administering Authority and where applicable to the letting employer, and will be reassessed at regular intervals. See also Note (i) below

The Fund will only consider requests from "CAB's" or other similar bodies to join the Fund if they are sponsored by a scheduled body with tax raising powers who will guarantee the liabilities of the body and supplemented, where appropriate, by the provision of 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 can seek admitted body status 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 who "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:

- **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.
- **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.
- **Fixed contribution rate agreed:** Under this option the contractor pays a fixed contribution rate and does not pay any cessation deficit. Any surplus or deficit present at the end of the contract period falls back to the letting employer.

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. However, this 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.

In the case of a transferee admission body, participation is assumed to expire at the end of the contract.

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, the Admission Body will be liable to pay an exit payment to the Fund and payment of this amount in full would normally be sought from the Admission Body; where there is a surplus it should be noted that under current legislation there is no mechanism to refund payment to the Admission Body. The actuary will adopt an approach which, to the extent reasonably practicable, protects the other employers from the likelihood of any material loss emerging in the future.

For transferee admission bodies, the cessation valuation will normally be calculated using the ongoing basis, in line with the basis on which they were admitted to the Fund. The original letting/outsourcing employer will then be liable for future deficits and contributions arising.

Appendix 2: Funding Strategy Statement 2017

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 there is a guarantor for future deficits and contributions, the cessation valuation will normally be calculated using the ongoing basis as described in Appendix C;
- b) Alternatively, 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;
- c) Where a guarantor does not exist for future deficits and contributions 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.

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 look to any bond, indemnity or guarantee in place for the employer.

In the event that the Fund is not able to recover the required payment in full, then the unpaid amounts will initially fall to the original letting/outsourcing employer (in the case of a transferee admission body) or in any other case 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.

4.4 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. The exceptions are Transferee admission bodies and community admission bodies that are deemed by the Administering Authority to have closed to new entrants. The current pools in place within the Fund are as follows:

- Hertfordshire maintained schools, academies, free schools, university technical colleges and studio schools; and
- Parish and Town Councils

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

Employers who participate in a pool, will be required to comply with the conditions and requirements set out in the pooling policy applicable to that Pool, which can be found at: <http://www.yourpension.org.uk/Hertfordshire/Fund-information/Policy-statements.aspx>.

Employers will be advised of their individual funding positions as well as that of the pool at each Valuation. In paying a pooled contribution rate, Pool Members must acknowledge that they may be paying a rate that is more or less than the employer contribution rate that would have been payable if the employer contribution rate had been determined on an individual employer basis. Pool Members may wish to consider making additional payments to the Pension Fund to improve their funding/balance sheet position, particularly where their funding level is lower than that of the rest of the pool.

4.5 Additional flexibility in return for added security

At its discretion, 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.

4.6 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). Note 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. Strain costs are payable in full in the year of retirement. The actuary's funding basis makes no allowance for premature retirement except on grounds of ill-health.

4.7 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).

Employers will usually have an 'ill health allowance' as calculated at each Valuation. The Fund monitors 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 will be charged additional contributions on the same basis as apply for non ill-health cases, as outlined in the Fund's Administration Strategy and in the case of admission bodies, in each separate Admission Agreement.

4.8 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.

4.9 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.

Appendix 2: Funding Strategy Statement 2017

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.

4.10 Policies on bulk transfers

The Fund will consider bulk transfers on a case by case basis, 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.

5 Funding strategy and links to investment strategy

5.1 What is the Fund's investment strategy?

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

The Investment strategy is set by the administering authority, and after taking investment advice. The precise mix, manager make up and target returns are set out in the Investment Strategy Statement, which is accessible from the Fund's website: <http://www.yourpension.org.uk/Hertfordshire/Fund-information/Policy-statements.aspx>

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.

5.2 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.

5.3 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 C3) 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 B1).

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.

5.4 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 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 and will be reviewed as part of the 2019 valuation.

5.5 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, on a quarterly basis and reports this to Pensions Committee and to the LGPS Board.

6 Statutory reporting and comparison to other LGPS Funds

6.1 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 the rate of employer contributions for each fund 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.

6.2 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

Appendix 2: Funding Strategy Statement 2017

- 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.

6.3 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:

- a) the rate of employer contributions is sufficient to make provision for the cost of current benefit accrual,
- b) 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 measures. 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.

- Relative measures are primarily concerned with comparing the Fund with other LGPS Funds and include:
 - the implied deficit recovery period (the estimated period until the Fund reaches a 100% funding level); and
 - the investment return required to achieve full funding after 20 years.

Absolute measures are primarily concerned with comparing the Fund with a given objective benchmark and include:

- the extent to which the contributions payable are sufficient to cover the cost of current benefit accrual and the interest cost on any deficit;
- how the required investment return under "relative considerations" above compares to the estimated future return being targeted by the Fund's current investment strategy;
- the extent to which contributions actually paid have been in line with the expected contributions based on the extant rates and adjustment certificate; and
- 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.

Appendix A – Responsibilities of key parties

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

A1 The Administering Authority should:-

- Operate the Fund in accordance with the LGPS Regulations;
- Effectively manage any potential conflicts of interest arising from its dual role as Administering Authority and a Fund employer;
- Collect employer and employee contributions, and investment income and other amounts due to the Fund;
- Ensure that cash is available to meet benefit payments as and when they fall due;
- Pay from the Fund the relevant benefits and entitlements that are due;
- Invest surplus monies (i.e. contributions and other income which are not immediately needed to pay benefits) in accordance with the Fund's Investment Strategy Statement (ISS) and LGPS Regulations;
- Communicate appropriately with employers so that they fully understand their obligations to the Fund;
- Take appropriate measures to safeguard the Fund against the consequences of employer default;
- Manage the valuation process in consultation with the Fund's actuary;
- Provide data and information as required by the Government Actuary's Department to carry out their statutory obligations (see Section 5);
- Prepare and maintain a FSS and an ISS, after consultation;
- Notify the Fund's actuary of material changes which could affect funding (this is covered in a separate agreement with the actuary); and

- Monitor all aspects of the fund's performance and funding and amend the ISS as necessary and appropriate.

A2 The Individual Employer should:-

- Deduct contributions from employees' pay correctly;
- Pay all contributions, including their own as determined by the actuary, promptly by the due date;
- Establish and exercise a discretion policy within the regulatory framework;
- Make additional contributions in accordance with agreed arrangements in respect of, for example, augmentation of scheme benefits, early retirement strain; and
- Notify the Administering Authority promptly of all changes to its circumstances, prospects or membership, which could affect future funding.
- In the case of admission bodies, ensure completion of admission agreements prior to contract commencement.

A3 The Fund Actuary should:-

- 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;
- Provide data and information as required by the Government Actuary's Department to carry out their statutory obligations (see Section 5);
- 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);
- Prepare advice and calculations in connection with bulk transfers and individual benefit-related matters;
- Assist the Administering Authority in considering possible changes to employer contributions between formal valuations, where circumstances suggest this may be necessary;
- Advise on the termination of employers' participation in the Fund; and
- Fully reflect actuarial professional guidance and requirements in the advice given to the Administering Authority.

A4 Other parties:-

- Investment advisers (either internal or external) should ensure the Fund's ISS remains appropriate, and consistent with this FSS;
- Investment managers, custodians and bankers should all play their part in the effective investment (and disinvestment) of Fund assets, in line with the ISS;
- 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;
- Governance advisers may be appointed to advise the Administering Authority on efficient processes and working methods in managing the Fund;
- 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;
- 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 B – Regulatory framework

B1 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 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.

B2 Consultation and review

The LGPS Regulations requires the Fund to consult on its FSS. 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 November 2016 for comment;
- b) Comments were requested within 60 days;
- c) There was an Employers Forum on 30 January 2017 at which questions regarding the FSS could be raised and answered;
- d) Following the end of the consultation period the FSS was updated where required, approved by the Fund’s Pensions Committee in February 2017 then published in March 2017.

B3 How is the FSS published?

The FSS is made available through the following routes:

- Published on the website, at: <http://www.yourpension.org.uk/Hertfordshire/Fund-information/Policy-statements.aspx>;
- A full copy is included in the annual report and accounts of the Fund
<http://www.yourpension.org.uk/Hertfordshire/Fund-information/Annual-reports.aspx>;

B4 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.

B5 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 Investment Strategy Statement, Governance Compliance Statement and Communications Strategy Statement. 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: <http://www.yourpension.org.uk/Hertfordshire/Fund-information/Introduction.aspx>

Appendix C - Actuarial assumptions

C1 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.

C2 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.

C3 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 2017 and setting contribution rates effective from 1 April 2018, the Fund actuary has assumed that future investment returns earned by the Fund over the long term will be 1.8% 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 Hertfordshire Pension Fund Annual Report and Accounts 2017/18

Appendix 2: Funding Strategy Statement 2017

funds, and continued austerity measures, the salary increase assumption at the 2016 valuation has been set to 0.9% below the retail prices index (RPI) per annum. This is a change from the previous valuation, which assumed 0.5% above RPI.

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, we propose a reduction of 1.0% per annum. This is a larger reduction than at 2013, when a reduction of 0.8% was applied to the RPI assumption. This 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 and at an employer level, the characteristics of each individual employer’s membership. 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 the same methodology as was adopted for the 2013 Valuation, but with updates to the underlying mortality tables.

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 D - The calculation of Employer contributions

In Section 2 a broad description of the way in which contribution rates are calculated was provided. This Appendix considers these calculations in much more detail. The calculations involve actuarial assumptions about future experience, and these are described in detail in Appendix C.

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 C2 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 C3 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 weighted 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 the cost of current employees' future benefit payments as they accrue. 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 Fund operates the same ultimate 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:

- meet the required funding target relating to past and future service benefit accrual
- within the determined time horizon (see 3.3 Note (c) for further details)
- 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 funding position at 31 March 2018 is a snapshot as at that date, and will be different thereafter depending on what has happened in the financial markets. The secondary contribution rate therefore reflects not only deficit contributions but also a "market adjustment" factor which takes account of how the liabilities and assets may evolve over time. The secondary rate therefore seeks to ensure, via the employer paying a certain level of contributions, that the past service liabilities are fully funded (on the funding target) within, and by the end of, the time horizon for a minimum number of outcomes ("the likelihood"). The secondary rate contributions are therefore set to achieve full funding allowing for the projection of assets and liabilities over an appropriate time horizon, for a given proportion of possible economic outcomes which allows for the inherent liability and asset volatility over time and seeks to avoid funding plans being driven by short term market movements. The secondary rate may be expressed as a percentage of pay or as a monetary amount per annum.

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;

Appendix 2: Funding Strategy Statement 2017

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:

- the actual timing of employer contributions within any financial year;
- 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 – Key risks and controls

The Fund has an active risk management programme in place. Key risks are incorporated in the Fund's risk register which is monitored on an ongoing basis and reported to the Pensions Committee and LGPS Board on a quarterly basis.

Risk	Summary of Control Mechanisms
The Pension Fund Investment Strategy does not deliver the long term projected investments returns and does not comply with legislation	Ensure the investment strategy complies with the Local Government Pension Scheme regulations, Investment Strategy Statement and Investment Management Agreements.
	Set the Investment Strategy in light of the Fund's solvency target and risk and return objectives and review at regular intervals to ensure the Strategy is still appropriate
	Diversify investment across asset classes and markets to reduce the impact of financial market volatility including setting a limit for the proportion of the Pension Fund's assets held in illiquid asset classes such as private equity and property and and keep the Fund's diversification policy under review.
	Establish limits for the maximum percentage of the total value of all investments in particular investments or classes of investment, within a prudential framework and after taking proper advice.
	Monitor and provide a quarterly report to the Pensions Committee on Investment Managers' performance against benchmark.
	Regularly review any assets that the Fund has previously determined should be held outside of the ACCESS pool, ensuring this continues to demonstrate value for money
	Monitor Investment Managers' compliance with the investment

Appendix 2: Funding Strategy Statement 2017

	restrictions and limits laid out in the Pension Fund's Investment Strategy Statement and Investment Managers' Agreements and report any cases of non-compliance
The funding level of the Pension Fund deteriorates	Set investment out-performance targets at the triennial valuation with reference to the Pension Fund's current Investment Strategy and on a relatively prudent basis to reduce the risk of under-performance against anticipated returns. At the same time, review and agree the other actuarial assumptions such as salary increases, discount rates, longevity etc.
	Provide the Pensions Committee with quarterly actuarial reports that monitor the funding position of the Pension Fund and the sensitivity of this to changes in general market conditions.
	Monitor and ensure scheme employers pay the extra capital/strain cost of non ill-health retirements following each individual decision and in the year the decision is made.
	Monitor each scheme employer's ill-health experience on an ongoing basis against the "ill health budget" set for each employer at the triennial valuation and require them to make additional contributions to the Pension Fund where budgets are exceeded.
	Monitor cash flows at a whole Pension Fund level and an individual scheme employer level and certify secondary contributions as a monetary amount for those with reducing payrolls as identified at the triennial valuation.

Risk	Summary of Control Mechanisms
	At each triennial valuation, assign any liabilities relating to ceased transferee admission bodies to the original ceding scheme employer.
	Monitor the 'characteristics' and individual funding position of pool members to ensure pooling is still appropriate. Require members of the Schools or Parish and Town Councils Pools to sign a pooling agreement which sets certain conditions and requirements for scheme employers' participation in the pool.
	Set maximum time horizons after taking into account the particular characteristics of each type of scheme employer and the future working lifetime of its employees. Use shorter deficit recovery periods for organisations with a limited "life" in the Pension Fund or without statutory tax raising powers.
	Monitor the covenant of scheme employers and use a risk based approach for setting contribution strategies for employers.
Scheme employers default on meeting their obligations to the Pension Fund and LGPS	Develop data quality controls with the Pension Fund's third party pension's administration service to monitor membership data submitted by scheme employers to ensure it is accurate and up to date.
	Develop a risk evaluation approach to identify covenant risk, categorising scheme employers as low, medium or high. Establish a set of risk criteria and monitor scheme employers against this. Engage with scheme employers at an early stage to address funding issues.
	Monitor contributions to ensure that scheme employers are paying the correct employer contribution rate to agreed deadlines.
	Do not allow unsupported employers to be admitted to the Pension Fund. Require all community admission bodies and transferee admission bodies to obtain a bond or guarantor from a scheme employer. Revalue bonds every three years to ensure the risk cover is still appropriate.
	Carry out regular financial checks on participating scheme employers, especially non-tax raising bodies.
	Carry out an annual employer survey to identify any changes in funding stream for scheme employers.
	Pool the contributions for scheme employers with similar characteristics to allow sharing of risk amongst scheme employers.
	Carry out cessation valuations on a more prudent gilts basis to ensure

Appendix 2: Funding Strategy Statement 2017

	the payment calculated when a scheme employer's liabilities are crystallised is sufficient to meet the future payment of benefits made by the Pension Fund.
The Pension Fund and its third party providers do not comply with regulations, statute or procedure	Review the Custodian's and Investment Managers' internal control reports to identify any concerns over controls and processes in place
	Ensure the Custodian undertakes monthly reconciliations with the Pension Fund's Investment Managers to ensure all assets are correctly accounted for and holdings are agreed.
	Require all large employers in the Pension Fund to provide an Annual Assurance Certification that payroll systems are compliant and have been tested by the scheme employers' internal auditors

Risk	Summary of Control Mechanisms
	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.
	Engage data matching service to receive earlier notifications of entitlement changes.
	Take proper advice to ensure a regulatory compliant asset pool in operation by statutory deadlines.
	Work in conjunction with the Strategic Procurement Group to ensure all procurements are carried out in accordance with HCC contract and EU regulations.
	Review the Pension Fund SORP in preparing the Statement of Accounts to ensure compliance and engage external audit to review the Pension Fund accounts each year.
	Manage performance of the Pension Fund's third party pension's administration service through a service level agreement and monitor against Key Performance Indicators.
	Work closely with the Pension Fund's third party pension's administration service to ensure it complies with current regulations and is alert to and can implement any changes to scheme benefits.
	Ensure the Pension Fund's third party pension's administration service has a robust programme in place to test controls on the membership benefit system and that they are fully compliant and up to date.
	Engage internal and external audit reports to regularly test that appropriate controls are in place over the payment of benefits and expenses and collection of contributions and that they are working effectively. Implement any recommendations resulting from both these audits.

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 Stabilisation	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. 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.

Actuary	An independent qualified consultant who advises on the financial position of the Pension Fund. Every three years the Actuary reviews the assets and liabilities of the Pension Fund and produces the actuarial valuation which recommends the employer contribution rates.
Administering Authority	A local authority required to maintain a pension fund under the Local Government Pension Scheme regulations. Within the geographical boundary of Hertfordshire, the Administering Authority is Hertfordshire County Council.
Admission agreement	A contract between an administering authority, admitted body and if applicable, the outsourcing Scheme employer.
Augmentation	Additional membership awarded to a member by their employer, to a maximum of ten years.
Benchmark	A notional fund which is developed to provide a standard against which an Investment Manager's performance is measured.
Bonds	A certificate of debt issued by a company, government or other institution. A bondholder is a creditor of the issuer and usually receives interest at a fixed rate. Also referred to as fixed interest securities.
Career Average Revalued Earnings (CARE) scheme	<p>A scheme that are a type of defined benefit pension scheme where the benefits at retirement are based on average pensionable earnings and the length of membership of the scheme.</p> <p>From 1 April 2014, the Scheme moved from a final salary scheme to a career average revalued earnings (CARE) scheme details of which are accessible from the Pension Fund website at https://www.yourpension.org.uk/Hertfordshire/Pensions-Home.aspx.</p>
Chief Finance Officer	An officer of that has delegated responsibility to manage the financial arrangements for an organisation. Hertfordshire County Council delegates these responsibilities to the post of the Director of Resources.
Communication Policy Statement	A statement of policy on communications with members and employers including the provision of information about the Scheme, the format, frequency and method of distributing such information and the promotion of the Scheme to prospective members.
Custody/Custodian	The safe-keeping of securities by a financial institution. The Custodian is responsible for maintaining investment records, the settlement of transactions, income collection, tax reclamation and other administrative actions in relation to the Pension Fund's investments.
Deferred members	Members who leave their employment or opt out of the Scheme and have their benefits deferred until retirement or until they request a transfer to another pension scheme.
Defined benefit final salary scheme	A pension scheme where the scheme rules define the benefits independently of the contributions paid by the members and employer. Members' benefits are a specified fraction of a scheme member's final pay.
Equities	Shares in UK and overseas companies.
Ex-officio	A member of a body (a board, committee, council, etc.) who is part of it by virtue of holding another office.
Final pensionable pay	The figure used to calculate a member's pension benefits and is normally a members pay in the last year before they retire. A member's benefits could also be calculated on one of the previous two years pay if that amount is higher, or the average of any three consecutive years in the last ten years if the member has had a downgrade in the last ten years or pay has been restricted in that period.
Fixed interest securities	Investments which guarantee a fixed rate of interest. The securities represent loans which are repayable at a future date but which can be traded on a recognised stock exchange until this time. Also known as bonds.
Forward foreign exchange contract	An agreement between two parties to exchange one currency for another at a forward or future date.
Funded scheme	A pension scheme that has available assets to cover all liabilities, including the obligation of future payments to retirees.
Funding Strategy Statement	A statement of the Pension Fund's strategy for meeting employers' pension liabilities.
Futures	Contracts to buy or sell specific quantities of a commodity or financial instrument at a specified price with delivery set at a specified time in the future.
Governance Policy and Compliance Statement	A statement of the governance arrangements of the Pension Fund including the delegation of responsibility, terms of reference, representation and compliance with statutory guidelines.
Hertfordshire Local Government Association	A voluntary organisation, acting on behalf of the local government sector in Hertfordshire.
Index linked	Bonds on which the interest and ultimate capital repayment are recalculated on the basis

Glossary to the Annual Report and Accounts

	of changes in inflation.
Investment Consultant	A professionally qualified individual or company who provides objective, impartial investment advice to the Pension Fund.
Investment Manager	An organisation that specialises in the investment of a portfolio of securities on behalf of an organisation subject to the guidelines and directions of the investor.
Lien	A form of security interest granted over an asset to secure the payment of a debt or performance of some other obligation.
Mandate	A set of instructions given to an investment manager as to how a fund is to be managed. Targets for performance against a benchmark or limits on investing in certain stocks or sectors may be set. This is formalised within an investment manager agreement between a pension fund and investment manager.
Pooled investment vehicles	An investment which allows investors' money to be pooled and used by investment managers to buy a variety of securities, thereby giving investors a stake in a diversified portfolio of securities.
Private equity	An asset class consisting of equity securities in operating companies that are not publicly traded on a stock exchange.
Quoted securities	Shares with prices quoted on a recognised stock exchange.
Rates and Adjustments Certificate	A certificate issued by the Pension Fund Actuary setting out the contribution rates payable by participating employers
Scheme	The Local Government Pension Scheme, a public sector pension arrangement put in place via Government Regulations, for workers in local government. The LGPS Regulations also dictate eligibility (particularly for scheduled bodies), members' contribution rates, benefit calculations and certain governance requirements. The Scheme is divided into 101 Pension Funds throughout the UK. Each pension fund is autonomous to the extent not dictated by the LGPS Regulations, e.g. regarding investment strategy, employer contributions and choice of advisers.
Scheme Administrator	An organisation responsible for the administration of the benefits of the Pension Fund, including the payment of benefits and maintenance of membership records. This is contracted to The London Pensions Fund Authority.
Spot market exchange rate	A spot exchange rate refers to the current exchange rate.
Investment Strategy Statement	A formal policy on how a pension fund will invest its assets including the types in investments to be held, the balance between different types of investments and risk.
Transfer values	A capital value transferred to or from a pension scheme in respect of a contributor's previous periods of pensionable employment.
Transferee admission bodies	An external body contracted to provide services or assets in connection with the exercise of a function of the local authority.
Unit Trust	A pooled fund in which investors can buy or sell units on an ongoing basis.
Unquoted securities	Shares which are dealt in the investment market but which are not listed on a recognised stock exchange.
VitaCurves	Bespoke analysis of the longevity of the Pension Fund's members.
Whole time equivalent salary	The pay a part-time member would receive if they worked full time.